

Document of

The World Bank

FOR OFFICIAL USE ONLY

Report No: PAD1258

INTERNATIONAL DEVELOPMENT ASSOCIATION

PROJECT APPRAISAL DOCUMENT

ON A

PROPOSED GRANT

IN THE AMOUNT OF US\$4.21 MILLION

TO THE

REPUBLIC OF MALDIVES

FOR A

CLIMATE CHANGE ADAPTATION PROJECT (CCAP)

May 7, 2015

Environment and Natural Resources Global Practice
South Asia Region

This document has a restricted distribution and may be used by recipients only in the performance of their official duties. Its contents may not otherwise be disclosed without World Bank authorization.

CURRENCY EQUIVALENTS

(Exchange Rate Effective: November 28, 2014)

Currency Unit	=	Maldivian Rufiyaa (MVR)
US\$1.00	=	MVR 15.34
US\$1.46	=	SDR 1

FISCAL YEAR

July 1 – June 30

ABBREVIATIONS AND ACRONYMS

AASWM	Ari Atoll Solid Waste Management
CABs	community advisory boards
CBD	Convention on Biological Diversity
CBO	community based organization
CCAP	Climate Change Adaptation Project
CCTF	Climate Change Trust Fund
E&S	Environmental and Social
EIA	Environmental Impact Assessment
EMPs	Environmental Management Plans
EPA	Environment Protection Agency
ESAMF	Environmental and Social Assessment and Management Framework
ESDD	Environment and Social Due Diligence
ESIA	Environment and Social Impact Assessment
EU	European Union
EUR	Euro
GDP	gross domestic product
GoM	Government of the Maldives
HDI	Human Development Index
IDA	International Development Association
IEC	information, education, and communications
IPCC	Intergovernmental Panel on Climate Change
ISN	Interim Strategy Note
IWMC	Island Waste Management Centers
LGA	Local Government Authority
M&E	Monitoring and Evaluation
MDGs	Millennium Development Goals
MEE	Ministry of Environment and Energy
MEMP	Maldives Environmental Management Project
MNU	Maldivian National University
MoFA	Ministry of Fisheries and Agriculture
MoT	Ministry of Tourism
MRC	Marine Research Centre

NGO	non-governmental organization
NPV	net present value
OECD	Organization for Economic Co-operation and Development
PAMU	Protected Area Management Unit
PDO	Project Development Objective
PMU	Project Management Unit
PSC	Project Steering Committee
RAP	Resettlement Action Plan
SEPA	Procurement Plan Execution System (Spanish)
SORT	Systematic Operations Risk-rating Tool
UNFCCC	UN Framework Convention on Climate Change
WCCM	Wetland Conservation and Coral Reef Monitoring for Adaptation to Climate Change project

Regional Vice President:	Annette Dixon
Country Director:	Francoise Clottes
Global Practice Senior Director:	Paula Caballero
Practice Manager:	Kseniya Lvovsky
Task Team Leader:	Priti Kumar

PROJECT APPRAISAL DOCUMENT

MALDIVES: CLIMATE CHANGE ADAPTATION PROJECT (CCAP)

TABLE OF CONTENTS

	Page
I. STRATEGIC CONTEXT	10
A. Country Context.....	10
B. Sectoral and Institutional Context.....	10
C. Higher Level Objectives of the Project	14
II. PROJECT DEVELOPMENT OBJECTIVES	14
A. Project Development Objective.....	14
III. PROJECT DESCRIPTION	15
A. Project Components	15
B. Project Financing	16
C. Lessons Learned and Reflected in the Project Design	17
IV. IMPLEMENTATION	18
A. Institutional and Implementation Arrangements	18
B. Results Monitoring and Evaluation.....	19
C. Sustainability	20
V. KEY RISKS	20
A. Risk Ratings Summary Table.....	20
B. Overall Risk Rating Explanation.....	21
VI. APPRAISAL SUMMARY	21
A. Economic Analysis	21
B. Technical.....	23
C. Financial Management.....	23
D. Procurement	24
E. Social (including Safeguards).....	24
F. Environment (including Safeguards)	25
Annex 1: Results Framework and Monitoring	27
Annex 2: Detailed Project Description.....	30
Annex 3: Implementation Arrangements	36
Annex 4: Implementation Support Plan	48

PAD DATA SHEET*Maldives**Climate Change Adaptation Project (P153301)***PROJECT APPRAISAL DOCUMENT***SOUTH ASIA**9061*

Report No.: PAD1258

Basic Information			
Project ID P153301	EA Category B - Partial Assessment	Team Leader Priti Kumar	
Lending Instrument Investment Project Financing	Fragile and/or Capacity Constraints [<input type="checkbox"/>]		
	Financial Intermediaries [<input type="checkbox"/>]		
	Series of Projects [<input type="checkbox"/>]		
Project Implementation Start Date 1-July-2015	Project Implementation End Date 30-Jun-2018		
Expected Effectiveness Date 1-July-2015	Expected Closing Date 30-Jun-2018		
Joint IFC No			
Practice Manager/Manager Kseniya Lvovsky	Senior Global Practice Director Paula Caballero	Country Director Francoise Clottes	Regional Vice President Annette Dixon
Approval Authority			
Approval Authority RVP please explain			
Borrower: Ministry of Finance and Treasury			
Responsible Agency: Ministry of Environment and Energy			
Contact: Telephone No.:	Ajwad Musthafa 009603018300	Title: Email:	Permanent Secretary ajwad.musthafa@environment.gov.mv
Project Financing Data(in USD Million)			
[<input type="checkbox"/>] Loan	[<input type="checkbox"/>] IDA Grant	[<input type="checkbox"/>] Guarantee	
[<input type="checkbox"/>] Credit	[X] Grant	[<input type="checkbox"/>] Other	
Total Project Cost:	4.31	Total Bank Financing:	4.21
Financing Gap:	0.10		

Financing Source					Amount					
Borrower					0.10					
Maldives Climate Change Trust Fund					4.21					
Total					4.31					
Expected Disbursements (in USD Million)										
Fiscal Year	2015	2016	2017	2018	0000	0000	0000	0000	0000	0000
Annual	0.00	1.00	2.0	1.31	0.00	0.00	0.00	0.00	0.00	0.00
Cumulative	0.00	1.00	3.0	4.31	0.00	0.00	0.00	0.00	0.00	0.00
Institutional Data										
Practice Area / Cross Cutting Solution Area										
Environment & Natural Resources										
Cross Cutting Areas										
<input checked="" type="checkbox"/> Climate Change <input type="checkbox"/> Fragile, Conflict & Violence <input checked="" type="checkbox"/> Gender <input type="checkbox"/> Jobs <input type="checkbox"/> Public Private Partnership										
Sectors / Climate Change										
Sector (Maximum 5 and total % must equal 100)										
Major Sector	Sector				%	Adaptation Co-benefits %		Mitigation Co-benefits %		
Agriculture, fishing, and forestry	General agriculture, fishing and forestry sector				100	100				
Total					100					
<input type="checkbox"/> I certify that there is no Adaptation and Mitigation Climate Change Co-benefits information applicable to this project.										
Themes										
Theme (Maximum 5 and total % must equal 100)										
Major theme	Theme				%					
Environment and natural resources management	Climate change				50					
Environment and natural resources management	Biodiversity				25					
Environment and natural resources management	Other environment and natural resources management				25					
Total					100					
Proposed Development Objective(s)										
The PDO is to demonstrate climate adaptive planning and management through the adoption of a multi-sectoral approach in Addu and Gnaviyani Atolls.										

Components			
Component Name	Cost (USD Millions)		
Wetlands conservation	2.40		
Coral reef monitoring	0.60		
Development of an island level integrated SWM system	0.81		
Mainstreaming climate change into island development planning	0.15		
Project Management	0.35		
Systematic Operations Risk- Rating Tool (SORT)			
Risk Category	Rating		
1. Political and Governance	Moderate		
2. Macroeconomic	Low		
3. Sector Strategies and Policies	Moderate		
4. Technical Design of Project or Program	Low		
5. Institutional Capacity for Implementation and Sustainability	Moderate		
6. Fiduciary	Moderate		
7. Environment and Social	Moderate		
8. Stakeholders	Low		
9. Other			
OVERALL	Moderate		
Compliance			
Policy			
Does the project depart from the CAS in content or in other significant respects?	Yes []	No [X]	
Does the project require any waivers of Bank policies?	Yes []	No [X]	
Have these been approved by Bank management?	Yes []	No [X]	
Is approval for any policy waiver sought from the Board?	Yes []	No [X]	
Does the project meet the Regional criteria for readiness for implementation?	Yes [X]	No []	
Safeguard Policies Triggered by the Project	Yes	No	
Environmental Assessment OP/BP 4.01	X		
Natural Habitats OP/BP 4.04	X		
Forests OP/BP 4.36		X	
Pest Management OP 4.09		X	
Physical Cultural Resources OP/BP 4.11	X		
Indigenous Peoples OP/BP 4.10		X	
Involuntary Resettlement OP/BP 4.12	X		
Safety of Dams OP/BP 4.37		X	
Projects on International Waterways OP/BP 7.50		X	
Projects in Disputed Areas OP/BP 7.60		X	
Legal Covenants			
Name	Recurrent	Due Date	Frequency
Maintenance of a PMU	Yes	Done	Continuous

Description of Covenant			
The Recipient shall maintain, throughout the period of Project implementation, a Project Management Unit (the “PMU”) within MEE, under the direction of qualified management provided with sufficient resources, and staffed with competent personnel in adequate numbers, with qualifications, experience, and under terms of reference acceptable to the World Bank.			
Name	Recurrent	Due Date	Frequency
Establish and maintain Protected Area Management Unit	Yes	August 30, 2015	Continuous
Description of Covenant			
The Recipient shall establish, and thereafter maintain throughout the period of Project implementation, a Protected Area Management Unit in each of Hithadhoo Island and Fuvahmulah Island, under the direction of qualified management provided with sufficient resources, and staffed with competent personnel in adequate numbers, with qualifications, experience, and under terms of reference acceptable to the World Bank.			
Name	Recurrent	Due Date	Frequency
Retain Evaluation and Exit Strategy Consultant	No	June 30, 2017	Once
Description of Covenant			
The Recipient shall retain the services of an evaluation and exit strategy consultant, with qualifications and experience and under terms of reference acceptable to the World Bank.			
Name	Recurrent	Due Date	Frequency
Adopt and implement Project in accordance with POM	Yes	N/A	Continuous
Description of Covenant			
The Recipient shall implement the Project in accordance with the provisions of the Operations Manual and in a manner satisfactory to the World Bank; and not amend, revise, waive or allow to be amended, revised, or waived, the provisions of the Operations Manual or any part thereof without the prior written approval of the World Bank.			
Name	Recurrent	Due Date	Frequency
Sign MOUs for Part 2 and Part 4(a) of the Project	No	September 30, 2015	Continuous
Description of Covenant			
The Recipient shall cause MEE to enter into memoranda of understanding, in form and substance satisfactory to the World Bank, with each of the following stakeholders: with the Ministry of Fisheries and Agriculture, the Ministry of Tourism and, individually, each of the Participating Resorts and Participating Dive Centers, setting out the stakeholders’ roles and responsibilities for the carrying out of Part 2 of the Project, including environmental and social safeguards measures in accordance with the Safeguards Instruments; with the Local Government Authority, setting out the stakeholders’ roles and responsibilities for the carrying out of Part 4(a) of the Project.			
Name	Recurrent	Due Date	Frequency
Sign MOU for Part 1 and Part 3 of the Project	No	Prior to start of activities	Continuous
Description of Covenant			
The Recipient shall cause MEE to enter into memoranda of understanding, in form and substance satisfactory to the World Bank, with each of the following stakeholders: with Addu City Council, setting out the stakeholders’ role and responsibilities for the carrying out of Parts 1 and 3 of the Project; and Gnaviyani Atoll Council, setting out the stakeholders’ roles and responsibilities for the carrying out of Parts 1 and 3 of the Project.			

Conditions					
Source Of Fund		Name		Type	
Description of Condition					
Team Composition					
Bank Staff					
Name		Title		Specialization	
Geeta Alex		Program Assistant		Program Assistant	
Junxue Chu		Senior Finance Officer		Senior Finance Officer	
Satish Kumar Shivakumar		Finance Officer		Finance Officer	
Darshani De Silva		Environmental Specialist		Environmental Specialist	
Parthapriya Ghosh		Senior Social Development Specialist		Senior Social Development Specialist	
Priti Kumar		Senior Environmental Specialist		Team Lead	
Muthukumara S. Mani		Lead Economist		Lead Economist	
Akiko Nakagawa		Senior Environmental Specialist		Senior Environmental Specialist	
Pamela Patrick		Program Assistant		Program Assistant	
Sunethra Chandrika Samarakoon		Procurement Specialist		Procurement Specialist	
Prabha Kumari Perera		Team Assistant		Team Assistant	
G. W. Anjali U. Perera Vitharanage		Procurement Analyst		Procurement Analyst	
Hisham A. Abdo Kahin		Lead Counsel		Lead Counsel	
Maya Sheli Port		E T Consultant		E T Consultant	
Kerima C. Thilakasena		Program Assistant		Program Assistant	
Bernadeen Enoka Wijegunawardene		Financial Management Specialist		Financial Management Specialist	
Non Bank Staff					
Name		Title		City	
Kalyani Kandula		S T Consultant		Hyderabad	
Locations					
Country	First Administrative Division	Location	Planned	Actual	Comments

I. STRATEGIC CONTEXT

A. Country Context

1. The Republic of Maldives is a collection of small coral islands in the Indian Ocean situated southwest of Sri Lanka. Its 1,190 islands are grouped into 26 atolls forming a chain of over 820 km in length and spread over an area of more than 90,000 square km. The islands are low lying with an average elevation of only 1.5 m. Only 33 of the 290 inhabited islands have a land area of more than one square km. The total population of Maldives in 2014 was about 341,000. With a Human Development Index (HDI) of 0.698 in 2013, it is above the South Asia regional average of 0.588. Economic progress has elevated the Maldives from being one of the 20 poorest countries in the 1970s to a middle-income country with a per capita income of about US\$7700 in 2012.

2. The biodiversity-based sectors contribute to 89 percent of the country's GDP, 98 percent of its exports, and 71 percent of employment. Agriculture and fisheries, that are both dependent on the country's unique natural resources, account for 3.4 percent of the GDP and 10.6 percent of employment. Nature-based tourism is the engine of economic growth, accounting directly for about 28 percent of the country's GDP. About 800,000 tourists visit the country annually (2008–2012) for its un-spoilt marine environment. Degradation of coral reefs and marine biodiversity will adversely impact the tourism sector, including related services, as well as transport and telecommunications sectors. In 2012, economic growth moderated to 3.4 percent due to a slowdown in the tourism sector because of a decrease in the number of tourists from Europe and other reasons.

3. Climate-change related risk for the Maldives includes sea-level rise, ocean acidification, cyclones, increasing air and sea surface temperatures, and changing rainfall patterns. From 1901 to 2010, global mean sea level rose by 0.19 m. Oceans have absorbed about 30 percent of the emitted anthropogenic carbon dioxide causing ocean acidification. Sea-level rise and extreme climate events, such as swell waves, storm surges, and the El Niño Southern Oscillation, present severe flood and erosion risks for low-lying islands. With 80 percent of its islands less than a meter above sea level and more than half the population living within 100 m of the coast, Maldives is highly vulnerable to any sea level rise. Projections indicate a change in the maximum sea level by as much as 8.2 cm to 9.5 cm by 2080. Projections by the Intergovernmental Panel on Climate Change (IPCC) for global mean sea level rise range from 0.26 m to 0.82 m for various scenarios for 2081–2100. Erosion of the shoreline is already a severe issue in 64 percent of the Maldivian islands. In recent years, the Maldives has already experienced frequent storm surges and coastal flooding. In the past six years, more than 90 percent of the inhabited islands have reported some flooding, with annual flooding on 37 percent of the islands. Climate change scenarios estimate that there will be an increase in rainfall over the entire country by 2100.

B. Sectoral and Institutional Context

4. Wetland conservation, coral reef conservation and solid waste management are critically important for the Maldives to adapt to climate change. Of the 1,190 Maldivian islands, 41 have wetlands. Wetland ecosystems help in climate change adaptation through

their role in flood and soil erosion control, groundwater recharge, freshwater storage and livelihood support. They lessen the effect of flooding during high rainfall events and storm surges and also provide water security during low rainfall periods. Rainfall-induced flooding is the most devastating impact of climate change, especially in the southern atolls where rainfall is comparatively higher. The larger islands contain extensive wetlands or low-lying areas. Expansion of settlements into the low-lying areas has caused occasional severe flooding in these islands.

5. The coral reefs of the Maldives are the seventh largest in the world and very rich in terms of species diversity and aesthetic appeal. The reefs host over 1,900 fish, 187 corals, and 350 crustacean species. The coral reefs are the first line of defense for the Maldivian islands against storms and sea-level rise. They decrease wave energy by an average of 97 percent and wave height by an average of 84 percent. The two major economic activities, tourism and fishing, are reef based. Sea surface temperature rise will likely result in increased coral bleaching and reef degradation. Ocean acidification causes corals to invest more energy in building their calcium carbonate skeletons thus reducing the energy they have to manage other stresses. Given the dependence of island communities on coral reef ecosystems for a range of services (including coastal protection, subsistence fisheries and tourism), coral reef ecosystem degradation will negatively impact island communities and livelihoods.

6. Inadequate solid waste disposal affects the health of vulnerable reef systems, contributes to the degradation of the vegetation belt, increases the risk of vector-borne diseases, and threatens the tourism and fisheries sectors. An estimated 312,075 metric tons of solid waste is discarded in the Maldives annually. About 51 percent of this waste comes from urban areas, 28 percent from island communities, and 21 percent from tourism. In many inhabited areas, there is no municipal collection system for household waste. Waste disposal practices vary among the islands depending on access to disposal facilities, local customs and government/council intervention. Waste may be dumped within the island (31 percent of islands), burnt (28 percent), disposed at the beach or sea (13 percent), buried (8 percent), sent to Thilafushi or another island (4 percent). Nearly 90 percent of the islands have their waste disposal sites within 100 m of the coastline and on the ocean-ward side. A total of 134 Island Waste Management Centers (IWMCs) have been constructed covering about 66 percent of islands but many are not functional. Solid waste in the Maldives has a high organic content that can be composted to reduce the total amount of waste that needs to be managed; an important option given the limited land availability in the Maldives.

7. A sound policy framework for wetlands conservation, coral reef protection and solid waste management is in place in the Maldives. The Government of the Maldives (GoM) is a signatory to the United Nations Framework Convention on Climate Change (UNFCCC), the Convention on Biological Diversity (CBD), and the Convention on the Prevention of Marine Pollution by Dumping of Wastes and other Matter. Work is underway for Maldives to become a signatory to the Convention on Wetlands (Ramsar Convention). The National Biodiversity Strategy and Action Plan (2002) emphasizes ecological sustainability, individual responsibility, equitable sharing of benefits, accountability of decision makers and public participation. The Third National Environmental Action Plan (2009–2013) stresses the importance of protecting and restoring coral, wetland and mangrove ecosystems and management of solid waste. The Strategic Action Plan (National Framework for Development

2009–2013) stresses conserving and sustainably utilizing biological diversity to ensure maximum ecosystem benefits. The National Adaptation Program of Action 2006 emphasizes wetland conservation through priority actions such as flood control, recognizes the importance of coral reefs, and also includes enhancing capacity for solid waste management as a priority action to prevent pollution of the marine environment. The Strategic National Action Plan for Disaster Risk Reduction and Climate Change Adaptation (2010–2020) includes a wide range of activities, such as early warning systems, knowledge management database, improved land planning, training on coral reef growing, and community based Disaster Reduction Management. The National Solid Waste Management Policy 2008 and Solid Waste Management Regulation 2010 set the policy framework for solid waste management. The Fourth Tourism Master Plan (2013–2017) addresses the vulnerability of the country against the potential impacts of climate change.

8. Overlapping mandates and fragmented responsibilities, however, are considerable impediments to policy formulation and implementation. Both the Environment Protection Agency (EPA) and Ministry of Fisheries and Agriculture (MoFA) have a mandate for coral reef conservation but there is no policy yet on marine protected area management that clarifies roles and responsibilities. Environmental management is largely practiced on a limited and voluntary basis on the islands as the atoll/island councils while mandated to manage natural resources have little means and resources to do so. Furthermore, the lack of technical and managerial capacity for environmental management, including infrastructure creation, community institution building, monitoring of impacts, constrains the implementation of environmental policies.

9. Mounting environmental pressure outpaces the country's ability to manage its environment and adapt to climate change. There is an urgent need to build environmental management capacity at the national, atoll and island levels. To date, there have only been few initiatives that focus on capacity building at the island level through a 'learning-by-doing' approach. The proposed project will build on the models developed in previous and ongoing initiatives in the Maldives in the areas of protected area management, solid waste management and capacity building. It will promote multi-sectoral interventions in a limited geographical area for direct and greater benefit to selected island communities and provide opportunities for exchange of experience and learning.

10. **Climate Change Trust Fund (CCTF).** The proposed project will be implemented under the multi-donor Maldives CCTF that was established in 2009 to support a climate resilient economy and society in the Maldives through adaptation, mitigation and low carbon development. The phase I of the CCTF was funded by the European Union (EU) and the Government of Australia with a total allocation of US\$10.3 million. Three projects have been implemented under the CCTF to date. The Wetlands Conservation and Coral Reef Monitoring for Adaptation to Climate Change Project (P128278) with a total funding of US\$3.8 million became effective in April 2011. The project supported community-based wetland management including ecotourism and drainage management on Hithadhoo island (Addu/Seenu atoll) and Fuvahmulah island (Gnaviyani atoll), rainwater harvesting on Ukulhas island (North Ari atoll), coral reef monitoring (North and South Male atolls), and capacity building for the local government. The Clean Energy for Climate Mitigation project (P128268), with a total budget of US\$2.53 million supported solar energy generation, energy

conservation and efficiency improvements, and technical assistance on G.Dh. Thinadhoo island. The Ari Atoll Solid Waste Management (AASWM) Pilot Project (P130163), with a total budget of US\$1.33 million supported the development of an island-level integrated solid waste management system in five pilot islands of the Ari Atoll (Dhigurah, Fenfushi, Ukulhas, Thoddoo and Dhangethi) and a residual waste transfer system for off-island disposal. These projects were completed on November 30, 2014.

11. These projects were multi-purpose in nature and scattered geographically to benefit communities in various islands and pilot a large number of different activities. Project implementation to date has shown that a geographically more concentrated approach would likely enhance the effectiveness of interventions and generate more benefits for local communities with a greater chance of long-term sustainability. A ‘model climate resilient atoll approach’ that could demonstrate water resource and wetland initiatives, coral reef monitoring, and solid waste management in few selected locations has therefore been recommended for the proposed Climate Change Adaptation Project (CCAP). The GoM has identified the Addu and Ganviyani atolls as implementation locations for the proposed project. The EU and Government of Australia expressed their intention to support the proposed CCAP as a second phase to the CCTF. The EU has provided an additional contribution of EUR 3.85 million and residual resources unutilized from the first phase will also get channeled into the second phase.

12. Addu and Gnaviyani together account for 8.14 percent of the country’s population and have a HDI of 0.647 which is lower than the country average. Hithadhoo island in Addu and Fuvahmulah island in Gnaviyani were the focus of implementation of the wetlands component of the Wetland Conservation and Coral Reef Monitoring for Adaptation to Climate Change project. Further project interventions are required to strengthen sustainability of the first-phase investments of community-based wetland management plans, community advisory boards (CABs) and eco-tourism facilities. The proposed project would also provide a critical opportunity to implement an urgently needed solid waste management system to help protect the wetlands of Fuvahmulah and Hithadhoo.

13. The proposed project would be in line with recommendations of a previous EU mid-term review that stated the need to: (a) focus on building better approaches and implementation practices on existing initiatives; and (b) institutionalize successful activities in relevant government departments for long-term sustainability. The project would therefore seek to: (a) strengthen ‘community wetland advisory boards’ in terms of formal recognition and institutional consolidation, and provide a mechanism for their continued involvement and capacity building through ‘learning-by-doing’; (b) strengthen the web-enabled database system developed under the first phase of the CCTF to ensure continued uptake, sustain confidence of tourist resorts in the National Coral Reef Monitoring Framework, and supplement it with a support facility for resorts; (c) expand the involvement of tourist resorts beyond coral reef monitoring to mainstreaming climate change into resort management; and (d) set up a system for waste management that is locally acceptable and operationally viable.

C. Higher Level Objectives of the Project

14. The World Bank Group Interim Strategy Note (ISN) for the Republic of Maldives (2014–2016) sets out a selective program in the short term to lay the foundation for the resumption of a full country program. Building on the Bank Group’s ongoing program of support and drawing on lessons learned from the Country Assistance Strategy (2008–2012), the ISN is anchored within a framework articulated around four main areas: (i) fiscal policy, (ii) public financial management and debt management, (iii) sustainable growth, social inclusion and service delivery, and (iv) environment and natural resource management.

15. Maldives has achieved five out of the eight Millennium Development Goals (MDGs). Progress has been substantial in eradicating extreme poverty and hunger (MDG1), achieving universal primary education (MDG2), reducing child mortality (MDG4), improving maternal health (MDG5), and combating HIV/AIDS, malaria and other diseases (MDG6). Progress has been relatively slower in achieving gender equality and women’s empowerment (MDG3), ensuring environmental sustainability (MDG7), and developing a global partnership for development (MDG8). The ISN notes that efforts for effective adaptation to climate change will need to be sustained in order for the Maldives to achieve all the MDGs.

16. The Bank is currently engaged through the International Development Association (IDA)-funded Environment Management Project and the recently concluded operation under the first phase of the EU and Australian Government-financed CCTF. The proposed CCAP, to be funded under the second phase of the CCTF, aims to contribute to improved monitoring and management of environmental risks to fragile coral reefs and other wetland habitats, and to improved solid waste management.

II. PROJECT DEVELOPMENT OBJECTIVES

A. Project Development Objective

17. The Project Development Objective (PDO) is to demonstrate climate adaptive planning and management through the adoption of a multi-sectoral approach in Addu and Gnaviyani atolls.

(a) Project beneficiaries

18. The key project beneficiaries are the local communities in the Addu and Gnaviyani atolls, selected private resorts, and island/atoll councils. Through interventions in wetland management and solid waste management in the Addu and Gnaviyani atolls, the project will benefit more than 4,800 households through enhanced tourism, livelihood opportunities, and ecosystem conservation. The coral reef monitoring intervention will directly benefit at least 10 private tourism operators. Through interventions in capacity building for mainstreaming of climate adaptation in island level planning, the project will benefit all the 20 atoll councils and 66 island councils in the country and the communities serviced by these councils.

19. The Ministry of Environment and Energy (MEE), including the EPA, the MoFA, including the Marine Research Centre (MRC), the Local Government Authority (LGA), and

the Ministry of Tourism (MoT) will benefit from enhanced capacity to deliver climate change adaptation interventions.

(b) PDO level results indicators

20. The PDO-level results indicators include the following:

- Targeted island representatives that demonstrate improved capacities to plan and manage multi-sectoral measures (Percent).
- Targeted households on the project islands that are aware of project information and investments (Percent).

III. PROJECT DESCRIPTION

A. Project Components

21. The project has been designed along five main components that are expected to contribute to delivering climate resilient island development in the project areas. The project design builds on the lessons and experiences from projects implemented under CCTF-I.

22. **Component 1: Wetlands conservation.** This component aims to establish a protected wetland management system to protect the wetlands and biodiversity in the Hithadhoo Protected Area (Eydhigali Kilhi and Koathey) of Hithadhoo island, and Bandaara Kilhi and Dhandimagu Kilhi in Fuvahmulah island; support the development of ecotourism and other sustainable activities that can contribute to the socio-economic development of the local community; and establish a model for management of the Protected Wetland Area. The component would finance the establishment of a protected wetland management system for Hithadhoo Island and Fuvahmulah Island, through: (a) the implementation of a zoning system and wetlands protection system; (b) implementation of an environmental education and communication program; (c) implementation of an eco-tourism program and construction of eco-tourism facilities; (d) support for local eco-friendly livelihood activities; (e) support for development of a national wetlands management strategy plan; (f) development of a Project exit strategy and future sustainability options for protected areas; and (g) carrying out of a feasibility study on the designation of Addu City and Fuvahmulah Island as Important Bird and Biodiversity Areas.

23. **Component 2: Coral reef monitoring.** This component aims to strengthen the Coral Reef Monitoring Framework for improved decision making and management of coral reefs and related ecosystems. The component will involve private sector stakeholders (such as tourist resorts, dive centers), as well as the planned Protected Area Management Unit (PAMU) in Hithadhoo for coral reef monitoring. The component will finance the scaling up of the coral reef monitoring system, through: (a) support for newly inducted and existing participating resorts and participating dive centers, and the PAMU in Hithadhoo Island on field data collection and the use of the CoralDatabase; (b) enhancing the functionality and user-friendliness of the CoralDatabase platform; (c) development of policy notes and organization of exchange workshops to enable strategic mainstreaming of the use of the

National Coral Reef Monitoring Framework; and (d) strategic and technical advisory support for the PMU, MRC and MoT.

24. **Component 3: Development of an island level integrated solid waste management system.** This component will help build the institutional capacity of Addu City and Gnaviyani Atoll Councils to plan an atoll/island level integrated solid waste management program to minimize the environmental risks to marine and terrestrial assets. The component will finance the provision of support for institutional capacity building for Island Councils and Atoll Councils in solid waste management planning, by: (a) carrying out of a strategic options study on solid waste management; (b) implementation of an atoll/island level composting program at island waste management centers (IWMCs) in Addu Atoll and Gnaviyani Atoll; (c) facilitation of training and capacity building including for contractors, and utility companies in solid waste management; and (d) conducting communications campaigns to encourage community participation in island solid waste management.

25. **Component 4: Mainstreaming climate change into island development planning.** This component aims to build awareness and strengthen local government capacity to address climate change adaptation issues relevant to island development and support tertiary level education in environmental management including climate change adaptation and mitigation. The component will finance the provision of support for the mainstreaming of climate change into island development planning, including through: (a) facilitation of training on climate change to selected representatives and staff of Atoll Councils, Island Councils, Women's Development Committees and non-governmental organizations; and (b) provision of scholarships for environmental management academic studies.

26. **Component 5: Project management.** This component will support management functions for implementing the project, including support for staff, monitoring, equipment, operating costs, etc. This component will finance the provision of support for project implementation, management, and monitoring and evaluation.

B. Project Financing

(a) Project cost and financing

27. The project will be implemented over a period of three and a quarter years from 2015 to 2018. The project will be financed by a grant from the EU as well as residual resources from the first phase of the CCTF. The project cost of US\$4.21 million is the sum of EU's additional contribution of EUR 3.85 million and residual resources of US\$948,182 from the first phase of CCTF, after subtracting World Bank's agency fee for fund administration, project management, and project preparation & implementation support. Table 1 below summarizes project cost by component.

Table 1: Project cost by component

Project Components	Project Cost US\$ million	CCTF Financing	% Financing
1. Component 1: Wetlands conservation	2.40	2.30	96
2. Component 2: Coral reef monitoring	0.60	0.60	100
3. Component 3: Development of an island level integrated solid waste management system	0.81	0.81	100
4. Component 4: Mainstreaming climate change into island development planning	0.15	0.15	100
5. Component 5: Project Management	0.35	0.35	100
Total Project Costs	4.31	4.21	100
Total Financing Required	4.31	4.21	100

C. Lessons Learned and Reflected in the Project Design

28. *Wetlands conservation:* This component takes into account lessons from past and existing activities in the Maldives and other countries (Tanzania, Indonesia, Vietnam), which have been incorporated into the project design as follows:

29. Good communication and cooperation between key stakeholders, including the local government, regulatory authorities and private sector stakeholders as well as building decentralized capacity in climate change adaptation and environmental management that is essential for wetlands conservation efforts. The project supports implementation of the community based wetland management plans that are an output of a collaborative process between the atoll councils, the community and the MEE. The institutional arrangements in the project include ‘focal points’ in each of the participating institutions to facilitate communication and cooperation between the key stakeholders.

30. An effective funding mechanism and exit strategy that has ownership of the Government is crucial for the sustainability of conservation efforts in wetlands management. The project supports the development of an exit strategy that will also spell out the funding mechanism for future sustainability of Protected Wetland Areas and eco-tourism facilities.

31. Establishing effective governance and institutional arrangements at both local and national levels is important. In addition to national level governance and institutional arrangements, the project’s support at the island level includes the strengthening of the Community Advisory Council and support for staff (such as protected area managers, and rangers).

32. *Coral reef monitoring:* This component takes account of lessons from past and existing activities in the Maldives and other countries. The following lessons have been incorporated into the design of the coral monitoring component:

33. In small island states commercial interests of private entities and singular focus of the government on infrastructure development serve as deterrents in sustained coral reef monitoring. Therefore, building a consensus and trust among the stakeholders for coral reef monitoring takes time and sustained efforts. Recognizing this, the project has chosen to work intensively with a limited number of private entities instead of adopting an extensive outreach model, which may compromise on the intensity of capacity building support.

34. A strategic plan for coral reef monitoring at the national level, which includes a national centralized database, is necessary to maintain stakeholder interests, manage expectations and sustain the monitoring efforts. Recognizing this, the project supports the development of policy notes and workshops on mainstreaming the National Coral Reef Monitoring Framework.

35. *Integrated island level solid waste management:* This component accounts for lessons from past and existing solid waste management activities in the Maldives. The following lessons were incorporated into the design:

36. The Maldivian islands are characterized by diversity in local conditions in terms of waste composition, community participation and economic enterprise. Therefore, solutions must be island-specific. There cannot be a ‘one-size-fits-all’ solution to solid waste management. It is with this understanding that the project supports a Strategic Options Study on solid waste management in Addu city and Gnaviyani/Fuvahmulah Atoll.

37. Strong consultation and community buy-in is key to the successful operation and sustainability of the system. IWMCs cannot operate satisfactorily unless an agreement has been reached with each participating community regarding the modality of waste management and unless islanders have agreed to collaborate. In view of this, a community awareness program on solid waste management, which will create awareness and solicit community participation for source segregation of household level solid waste, is now part of the project.

38. Given the high cost of transportation, the waste volume needs to be reduced by carrying out composting of organic wastes on the island of origin. Recognizing this, the project supports composting facilities at three IWMCs.

39. *Mainstreaming climate change into island development planning:* The lessons on capacity building that have been incorporated are as follows:

40. Short and intensive workshops appear to have had little impact on the skills base and management capacity. Building institutional skills and capacity is a long-term process that requires continuing engagement and a gradual acquisition of skills. Capacity building at the tertiary level will help create a collection of professionals with specialized skills. The project includes support to an ongoing Advanced Diploma/Bachelor’s Degree in Environment Management program run by the Maldivian National University (MNU).

IV. IMPLEMENTATION

A. Institutional and Implementation Arrangements

41. The governance arrangements for CCTF-I would apply to the CCAP as well. The Climate Change Advisory Council (CCAC) is responsible for strategic guidance. The Economic & Youth and Social Councils, with their secretariat in the President’s Office, approve the proposals referred by the CCAC. The Steering Committee comprised of participating GoM entities and donors reviews progress and provides guidance for implementation. The Technical Committee comprising of experts, private sector and civil society organizations monitors implementation progress and assesses on-ground results.

42. Institutional and implementation arrangement for this project will build on the projects supported under CCTF-I and are as follows:

43. The MEE has the overall responsibility for project implementation. The existing Project Management Unit (PMU) within the MEE will coordinate day-to-day project activities and ensure compliance with the project's fiduciary and safeguards regulations. Some of the PMU staff will be posted in Hithadhoo and Fuvahmulah to guide and supervise project implementation on site.

44. The MEE will execute the project through the EPA, MoFA, LGA and MoT, and will sign partnership agreements with these institutions. The EPA will provide technical oversight and coordination support to the wetland conservation and solid waste management components, as well as regulatory clearance to the safeguards documents of the project and permits for survey activities. The MoFA through the MRC will provide technical oversight and coordination support to the coral reef monitoring component, setup standards, audit monitoring compliance, lead policy initiatives and eventually own the CoralDatabase. The MoT will support implementation and delivery by the tourist operators and provide assistance in coordinating coral reef monitoring activities. The LGA through its master trainers will deliver training to atoll and island councils for mainstreaming climate change into island development planning. The MNU will administer sponsorships to students to pursue the course on Advanced Diploma/Bachelor's Degree in Environment Management.

45. At the island level, the MEE will work in close coordination with the atoll/island councils, CABs, the PAMUs and the participating resorts/dive centers and will sign partnership agreements with these institutions. The atoll/island councils will facilitate community participation in project implementation, coordinate with the PMU and EPA to facilitate effective functioning of the PAMU and coordinate with the utility company on the functioning of the IWMCs. The CABs will coordinate with the atoll/island councils to support the effective functioning of the PAMU. The PAMU will manage the Protected Wetland Area as well as implement the eco-tourism interventions. The participating resorts/dive centers will undertake coral reef monitoring as per the agreed protocols and update the CoralDatabase.

46. The institutional and implementation arrangements are described in detail in Annex 3.

B. Results Monitoring and Evaluation

47. A Results Framework that describes the PDO-level outcome indicators and component-specific intermediate indicators, including core sector indicators, and respective baselines and targets is included in Annex 1.

48. Monitoring and evaluation (M&E) arrangements build upon the arrangements established under CCTF-1. The Project Manager in the PMU has overall responsibility for planning and implementation of M&E activities. The PMU will prepare a technical M&E report on a quarterly basis. A survey-based evaluation will be undertaken on the project islands at the end of every financial year and completed three months before the end of the project implementation period. The study will assess progress towards achievement of the PDO and outcomes and identify an exit strategy for sustainability and scaling-up.

C. Sustainability

49. The project aims to develop institutional capacities at the national and local levels to help sustain project achievements in the long term. At the atoll/island level, the project will train atoll/island councils, community groups and private resorts/dive centers. At the national level, the project will build the capacity of the implementing agency and its partner institutions through technical assistance. Investments in partnerships with institutions, such as EPA, MoFA, MRC, LGA, MNU and others, will build the foundation for continued research and program implementation for building climate resilience in communities. Staff seconded to the PMU from key government institutions will contribute to strengthening capacities of national government officials in areas of wetland conservation, coral reef monitoring, solid waste management, capacity building, fiduciary compliance, as well as environmental and social safeguards. By supporting graduate education in environmental management, the project is investing in developing local human resource that can contribute to building the country’s adaptive capacity. At the policy level, the project will invest in: (a) a White Paper on a model for sustainable protected wetland management; and (b) a policy note on mainstreaming the use of the National Coral Reef Monitoring Program in Environmental Impact Assessment (EIA) regulations, resort lease conditions, etc.

50. Financial sustainability of the proposed project activities is built into the project interventions. The project will invest in developing and pilot testing a model for community-based wetland protection and management that involves generating revenue through eco-tourism initiatives. Tourist resorts will provide in-kind contributions for coral reef monitoring during implementation and are expected to continue to do so after the project period. User fees for solid waste management will strengthen cost recovery. While these interventions will not meet all costs to sustain the activities, they are important to sustain community engagement.

51. While the interventions mentioned above on institutional capacity building, policy and financial sustainability will help build sustainability, they may not by themselves ensure that the project achievements sustain into the long term. Considering this, the project will invest in the development of an exit strategy document for the CCAP and will help mainstream and contribute to sustainability of interventions. The exit strategy document will spell out a clear strategy that will articulate the sustainability plan including institutional, financial and policy arrangements.

V. KEY RISKS

A. Risk Ratings Summary Table

Table 2: Systematic Operations Risk-rating Tool (SORT)

Risk Category	Rating
1. Political and Governance	Moderate
2. Macroeconomic	Low
3. Sector Strategies and Policies	Moderate
4. Technical Design of Project or Program	Low
5. Institutional Capacity for Implementation and Sustainability	Moderate
6. Fiduciary	Moderate
7. Environment and Social	Moderate
8. Stakeholders	Low
OVERALL	Moderate

B. Overall Risk Rating Explanation

52. **The risk assessment for the proposed project uses the Bank’s Systematic Operations Risk-rating Tool (SORT).** The risks considered are the risks to development results associated with the operation: both the risks to not achieving the intended (positive) results pursued by the CCAP and the risks of the operation causing unintended (negative) results. In addition, the assessment takes into account both the likelihood of the risk materializing, as well as the severity of its impact on the achievement of the intended results. The risk assessment in the SORT matrix above is based on *current residual* risk (i.e. after taking into account the impact of mitigation measures that have already been implemented), but not presuming any future additional mitigation measures, beyond those already in place.

53. **The overall risk for the proposed CCAP has been rated as “moderate”.** Overall risk assessment and management is strongly derived from the lessons learned from CCTF-I. The proposed project is relatively small, with a simple design and without any large procurement. No major social and environmental risks related to safeguards compliance are expected. The main risks associated with the project are linked to the institutional capacity. Although the implementation arrangements are built on the projects supported under CCTF-I, associated risks have been rated as “moderate” to reflect implementation delays during the first phase, mostly related to delays in procurement, as well as not having a fully functional and proactive governance structure for the CCTF.

VI. APPRAISAL SUMMARY

A. Economic Analysis

54. The project supports a diverse set of environmental management activities, including wetland protection and management, coral reef monitoring, and solid waste management. These activities deliver both direct and indirect benefits to the communities in Addu city and Gnaviyani/Fuvahmulah as well as to the Maldives as a whole.

55. **Direct and indirect benefits.** Direct project benefits to local communities include better control of encroachment and waste dumping in wetlands, livelihood enhancement, and more effective solid waste management. The direct benefits at the national level include availability of data on coral reef status, development of skilled human resource on environmental management, and enhanced capacity of atoll/island councils in mainstreaming climate change issues in island development planning. The indirect benefits from the project activities include conservation of wetlands and coral reefs, reduced solid waste spillage, and climate resilient island/atoll development and more sustainable tourism.

56. **Development impact.** Capacity building through the CCAP is expected to lead to greater climate resilience and improvements in the ecology of wetlands and coral reefs. Project benefits and impacts also include the conservation of biodiversity, improved tourist

satisfaction, mainstreaming of climate change issues into resort/dive center management, reduced solid waste spillage, and strengthened capacity of atoll/island councils. These benefits are not direct and measurable in quantitative terms.

57. Evidence from similar investments in other countries indicates that there is potential for significant economic returns. An economic analysis carried out during the implementation of the Vietnam Coastal Wetlands Protection Project, which focused on re-establishment of coastal mangrove wetland ecosystems, showed an economic rate of return of 17 percent and a net present value (NPV) of US\$14.2 million (total project costs were US\$55.4 million).

58. Conserving coral reefs is a cost-effective approach for enhancing first-line coastal defenses. The median cost of building tropical breakwaters is US\$19,791/m. The project intervention on coral reef monitoring, which will build capacity of tourist resorts and dive centers on monitoring of coral reefs with the ultimate objective of their conservation, costs US\$0.8 million, which is approximately the cost of construction of just 40 m of tropical breakwaters.

59. The economic analysis of the AASWM project indicates that the project's approach to solid waste management is cost-effective with an NPV (12 percent discount rate over 15 years) amounting to US\$2.5 million. This is considerably less than the non-project options with the NPV ranging from US\$7.7 million to US\$20.2 million.

60. Based on a cost effectiveness analysis done in the Maldives Environmental Management Project (MEMP), in-country training on environmental management (four-year BSc degree) is estimated to cost around US\$20,000 per student for four years compared to US\$48,000 per student in non-OECD countries (costing estimated in the year 2008).

61. **Rationale for public investments.** The project is supporting public investments to establish proof of concept of successful demonstrations as well as catalyzing alternate mechanisms of operations and maintenance, and cost recovery with the help of local institutions and the private sector. In particular, the project's support to capacity building of decentralized institutions (local councils) will enhance wetland management and solid waste management through training, technical support and developing management plans. The project's investments in ecotourism are expected to yield revenues that would provide a long-term stake to local councils to conserve wetlands. In the areas of coral reef monitoring, the project investments in monitoring and capacity building systems will create a positive environment for the central ministry to partner with the private sector (tourist resorts) to provide an information platform for coral reef monitoring and play a supportive role (standard setting, supervision, audit, technical support) in coral reef monitoring. This model would allow the government to recover costs in the long term by charging resorts for using the information platform and support services.

62. **World Bank value added.** The Bank has supported activities in the areas of wetland conservation, coral reef monitoring, and solid waste management through CCTF-I, MEMP, and the AASWM Project. The Bank has also developed considerable experience in the areas of climate change adaptation, solid waste management, wetlands conservation and coral reef management across several regions. The Bank's multi-sectoral expertise available in the thematic Global Practices and lessons learnt from projects will guide the implementation of

the CCAP particularly in the areas of: (i) community-based wetland management planning and implementation; (ii) coral monitoring protocols and management systems; (iii) technical and financial solutions for solid waste management; and (iv) ecologically sustainable economic opportunities.

B. Technical

63. The Bank group's adaptation efforts¹ have largely been on supporting activities that address current climate variability. Projects and country assistance strategies that address climate adaptation have focused on today's climate challenges, including disaster risk management, water management, habitat conservation, sustainable agriculture and improving hydromet systems. These are mostly robust (no-regret) options that also boost resilience to future climate patterns, regardless of how they unfold. This is particularly true of projects that boost institutional capacity providing greater capability to deal with an uncertain future. The CCAP integrates the following elements in its strategy for climate adaptation: (a) building adaptive capacity in island communities and local government institutions; (b) including interventions that contribute to building resilience and enhancing livelihoods of island communities; (c) focusing on a data-centric approach to coral reef protection activities; and (d) including a robust M&E system to track performance as well as identify any unexpected maladaptive outcomes.

C. Financial Management

64. The existing PMU on behalf of the MEE is experienced in handling Bank funded operations and would be responsible for the overall financial management arrangements of the project. There will be no funds transferred to any other agencies. The accounting and payments process will be centralized at the PMU. The Finance Officer in the PMU will continue to have oversight responsibility for implementing financial management arrangements. The existing financial management arrangements were re-visited and staff capacity assessed during appraisal upon which the financial management capacity assessment was finalized. There are no overdue audit reports or ineligible expenditures under the existing implementing agency. The PMU has revised the existing Operations Manual, which was developed for CCTF-I, to meet the requirements for the project, including the financial management arrangements.

65. There is project readiness for implementation from a financial management perspective. The next steps after grant signing include opening of a dedicated Designated Account in US Dollars with the Maldivian Monetary Authority, the Central Bank, to receive funds from CCTF through International Development Association (IDA). The project will undergo regular internal audits by the MEE's internal audit unit, and internal audit reports will be shared with the Bank. Financial statements of the project will be prepared by the PMU and audited annually by the Auditor General's Office of Maldives. These audited financial statements together with the auditor's report will be submitted to the Bank within six months of the end of the fiscal year. The Bank's financial management specialist will carry out supervision at least once every six months to periodically monitor the adequacy of the project's fiduciary

¹ Adapting to Climate Change: Assessing the World Bank Group Experience (Advance Edition). Phase III of the World Bank Group and Climate Change. Independent Evaluation Group. Viewed at http://ieg.worldbankgroup.org/content/ieg/en/home/reports/climate_change3.html on 26 April 2013.

arrangements. The project includes provision for retroactive financing up to 20% of the total grant value (or US\$ 0.842 million) for payments made prior to Grant signing date but on or after December 1, 2014. More details on financial management are provided in Annex 3.

D. Procurement

66. The main procurement risks identified by the assessment are: (a) inefficiencies in the complaint redressal system; (b) poor implementation of public disclosure procurement actions; (c) inherent weaknesses in transparency and fairness of procurement processes; (d) inadequate capacity of national consultants/contractors that in some cases hinders designing appropriate qualification requirements as per Bank's Standard Bidding Documents for Goods and Works; and (e) inadequate experience in contract administration. The agreed upon risk management measures include: (a) training of procurement staff, specifically on fraud and corruption flags, and on addressing complaints; (b) preparation of an annual procurement progress report (which will include, inter alia, procurement plan updates, action on findings of post reviews and other procurement and contract administration issues) by the PMU to forward to the Bank; (c) implementation of a monitoring mechanism for procurement by the PMU, which will include implementation, as well as the defects liability phase and warranty phase of contracts; and (d) corrective actions to be taken to address deficiencies identified by the Bank post reviews.

67. The PMU, that manages several of the Bank's funded projects, will be responsible for overall procurement oversight under this project. The staff in this unit has adequate experience in Bank procurement procedures and can handle complex operations. A Procurement Officer in the PMU will manage all the procurement in the CCAP and may be assisted by junior staff. Project staff will receive procurement training facilitated by the Bank, through a comprehensive capacity building program within and outside the country. This program improves the skills on procurement and contract administration. Further, junior staff are usually trained on-the-job. The MEE has prepared the draft procurement plan for activities for the first 18 months. The Procurement Plan will be updated in agreement with the Project Team annually or as required, to reflect the actual project implementation needs and improvements in institutional capacity. More details on procurement are provided in Annex 3.

E. Social (including Safeguards)

68. The CCAP does not envisage any significant adverse social impacts. However, project interventions on wetland conservation could potentially have a negative impact on the livelihoods of communities dependent on the wetlands for cultivation due to potential restrictions in access to natural resources. OP4.12 on Involuntary Resettlement is therefore applicable to the project. The participatory and community based nature of wetlands planning and implementation is likely to have a positive impact on the island communities. In order to ensure sustainability of the project interventions meaningful participation and engagement of local communities is emphasized via interventions such as: (a) information, education, and communications (IEC) campaigns; (b) mobilization of local communities (particularly women); (c) transparent consultations; and (d) dissemination of project information.

69. An Environmental and Social Assessment and Management Framework (ESAMF) was developed for the CCAP to minimize adverse impacts. The ESAMF is based on the

Environment and Social Due Diligence (ESDD) reports prepared for the WCCM and AASWM projects and the Environment and Social Impact Assessments (ESIAs) carried out for the WCCM project in 2013. The ESAMF includes a screening process of project activities, guidelines for assessment of adverse impacts, an entitlement framework and mitigation of social risks, and guidance on preparation of Resettlement Action Plan (RAP), if required. As part of the ESAMF, a Process Framework has been prepared to address social impacts from restrictions of access to natural resources. The Framework describes the requirements and planning procedures for grant applicants and subsequently grantees in the preparation and implementation of related activities. As part of the ESAMF, a Gender Development Framework has also been developed to help analyze gender issues both during the preparation as well as implementation stages of the sub-project, and to design interventions to address women's needs. Gender analysis will be part of the social assessment at the sub-project level. The PMU has revised the existing Operations Manual that was developed for CCTF-I to meet the social safeguards requirements of the project.

70. An Environmental and Social (E&S) Safeguards Coordinator in the PMU with support from E&S Officers on each of the islands will be responsible for managing the CCAP safeguards requirements such as providing oversight to implementation of social management plans and grievance mechanism; liaison with other agencies, contractors and engineering supervisors at the island level; monitoring and evaluation; and training (this also applies to Section F below).

71. Consultations on the draft ESAMF have taken place with the councils of Fuvahmulah and Addu city and disclosed in-country on September 11, 2014. The consultation results were incorporated in the final ESAMF, and the final ESAMF was re-disclosed in-country on November 26, 2014. The ESAMF has been translated in Divehi and a hard copy of the translated version will be placed in all Addu city/Fuvahmulah atoll council offices. The ESAMF has been disclosed on InfoShop on December 11, 2014. The Process Framework was also disclosed in-country on January 29, 2015 and on Infoshop on February 5, 2015. A three-tier grievance mechanism involving the island councils, community advisory board and MEE are established for the community members.

F. Environment (including Safeguards)

72. The CCAP does not envisage any significant adverse environment impacts. However, some possible negative impacts may occur, including the restriction of agriculture in some areas, disturbance to roosting and breeding sites of water birds, transferring the solid waste problem to another location, etc. Coral reef monitoring may cause temporary local disturbance, accidental damage to corals, and some safety risk. There is limited capacity (number and technical qualification of staff) to manage environmental and social impacts in the local councils. The following safeguard policies are applicable to the CCAP.

- OP 4.01 – *Environmental Assessment* to ensure any environmental impact associated with project activities are identified in time and mitigated.
- OP 4.04 – *Natural Habitats* as the project area consists of Protected Areas and Environmentally Sensitive Areas.
- OP 4.11 – *Physical Cultural Resources* due to the ‘chance-find’ issue.

- OP 4.12 – *Involuntary Resettlement* to address social impacts from regulations on access to designated Protected Areas.

73. The ESAMF includes protocols for screening project activities, guidelines for mitigation of environmental and social risks, and guidance on development of ESIA and Environmental Management Plans (EMPs). It also specifies a plan for providing basic training for using the screening protocols and mitigation guidelines. The associated cost to implement EMPs has been integrated into the project budget. The project will ensure that all works contracts will include the EMP, and the cost of implementing the EMP will be identified as an item in the Bill of Quantities.

74. Consultations with key stakeholders including atoll/island councils have been held in Addu city and Fuvahmulah during August 27–28, and September 18, 2014 to inform stakeholders as well as project affected people. The details of the project activities, environmental and social risks involved and proposed mitigation measures including the grievance redressal mechanism were shared during these consultations. The consultation discussions and opinions/suggestions of the stakeholders have been documented as part of the ESAMF. The operational requirements of the ESAMF are captured in the Operations Manual of the project.

Annex 1: Results Framework and Monitoring
REPUBLIC OF MALDIVES: Climate Change Adaptation Project (CCAP)

PDO: The PDO is to demonstrate climate adaptive planning and management through the adoption of a multi-sectoral approach in Addu and Gnaviyani atolls.											
PDO Level Results Indicators	Core	Unit of Measure	Baseline	Target Values (Cumulative)			Frequency	Data Source / Methodology	Responsibility for Data Collection	Description (indicator definition etc.)	EU Results Reference
				Year 1	Year 2	Year 3					
Targeted island representatives that demonstrate improved capacities to plan and manage multi-sectoral measures.		Percent	0	10	40	50	Annual	Baseline and endline surveys	PMU	Measure of the effectiveness of the project processes and measures to improve adaptive capacity of the targeted island representatives (Island Council staff and officials, representatives of Women Development Committees and Community Advisory Board, PAMU staff) for planning and management	Results 1 & 2
Targeted households on the project islands that are aware of project information and investments.		Percent	0	20	50	80	Annual	Baseline and endline surveys	PMU	Measure of effectiveness of consultation and communication in terms of ensuring that project information has been effectively communicated to households on the participating project islands	Results 1 & 2
Component 1: Wetlands Conservation											
Indicator 1: Protected Area Management units established in Hithadhoo and Fuvahmulah.		Number	0	2	2	2	Six-monthly	PMU	PMU	Number of Protected Wetland Management units	Result 1 (i)
Indicator 2: Eco-tourism facilities operational in Hithadhoo and Fuvahmulah.		Number	0	0	2	2	Annual	PMU	PMU	Number of functional eco-tourism facilities	Result 1 (i)
Indicator 3: Direct beneficiaries of eco-	<input type="checkbox"/>	Number	0	0	30	60	Annual	PMU	PMU	Local community	Result 1

friendly livelihood activities.										members on project islands who directly derive benefits from livelihoods based intervention	(i)
Indicator 3a: Female beneficiaries of eco-friendly livelihood activities.	<input type="checkbox"/>	Percent	0	10	20	30	Annual	PMU	PMU	Direct female beneficiaries who directly derive benefits from livelihoods based intervention	Result 1 (i)
Component 2: Coral Reef Monitoring											
Indicator 4: CoralDatabase includes one post-baseline dataset from 5 existing partners; and, the baseline and one post-baseline dataset from at least 5 new partners.		Number	5	5	10	10	Six-monthly	PMU and MRC	PMU and MRC	Number of participating private sector entities	Result 1 (ii)
Indicator 5: Policy briefs on the National Coral Reef Monitoring Framework.		Number	0	0	2	3	End of project	PMU and MRC	PMU and MRC	Number of policy briefs	Result 1 (ii)
Component 3: Development of an Island level Integrated Solid Waste Management System											
Indicator 6: Strategic Options Study on solid waste management completed.			0	0	1	1	Annual	PMU	PMU	Number of study reports	Result 1 (iii)
Indicator 7: Two IWMCs in Fuvahmulah and Hithadhoo are operational.		Number	0	0	2	2	Annual	PMU	PMU	Number of Island Waste Management Centres	Result 1 (iii)
Component 4: Mainstreaming of Climate Change											
Indicator 8: Direct beneficiaries of training on climate change mainstreaming.	<input type="checkbox"/>	Number	300	625	750	835	Six-monthly	PMU and LGA	PMU and LGA	Representatives of atoll/island councils (staff, elected representatives, WDC members, NGOs, etc.) that directly benefit from training on mainstreaming environmental management and climate change into island development planning and monitoring.	Result 2
Indicator 8a: Female beneficiaries of training on climate change mainstreaming.	<input type="checkbox"/>	Percent	5	10	10	15	Six-monthly	PMU and LGA	PMU and LGA	Female representatives of atoll/island councils (staff, elected representatives, WDC members, NGOs, etc.) that directly benefit from training on	Result 2

										mainstreaming environmental management and climate change into island development planning and monitoring.	
Indicator 9: Students supported to pursue the Advanced Diploma/Bachelor's Degree in Environment Management program in the Maldivian National University.		Number	7	12	12	12	Annual	PMU and MNU	PMU	Number of students	Result 2

EU Results

Result 1 – Climate resilience of vulnerable communities living in Addu city and Fuvahmulah atolls is strengthened by the end of the implementation period: (i) improved benefits to communities of Hithadhoo and Fuvahmulah from wetland management and eco-tourism interventions and completion of baseline survey activities to designate Addu and Fuvahmulah as a biosphere reserve; (ii) coral reefs protected through training/awareness programmes to resorts in Addu and other areas and (iii) improved technical and regulatory capacity for GoM on strategic options and solutions for waste management, including WTE and exploring public private partnerships

Result 2 – Improved capacity and knowledge of GoM, Addu City Council, Fuvahmulah Atoll Council staff, utility companies, youth and other national stakeholders to manage proposed interventions and to undertake environmental management and climate change related planning, development and monitoring.

Annex 2: Detailed Project Description

REPUBLIC OF MALDIVES: Climate Change Adaptation Project (CCAP)

1. The CCAP will have five components:
2. **Component 1: Wetlands conservation:** The purpose of this component is to establish a protected wetland area management system based on the implementation of the community based wetland management plans for Hithadhoo and Fuvahmulah, developed with support from the WCCM project under the CCTF-I.
3. The main objectives of this component are: the protection of the wetlands and biodiversity in the Hithadhoo Protected Area (Eydhigali Kilhi and Koathey) (declared in December 2004) of Hithadhoo, and Bandaara Kilhi and Dhandimagu Kilhi in Fuvahmulah (declared in June 2012); the development of ecotourism and other sustainable activities that can contribute to the socio-economic development of the local community; and, establishing a model for management of the Protected Wetland Area and allied activities.
4. The key activities include: implementation of a zoning system and wetlands protection system in Hithadhoo and Fuvahmulah (regulating access, preventing encroachment, preventing waste dumping, etc.); implementation of an environmental education and communication program; implementation of an eco-tourism program including construction of eco-tourism facilities (visitor center in Hithadhoo; boardwalk, bird observatory, interpretive signage, tourist information center, etc. in Fuvahmulah), implementation of a code of conduct for eco-tourists, training and certification of eco-tourism guides; support to local eco-friendly livelihood activities (including artisanal crafts, organic farming, guiding, etc.), through provision of training, equipment, inputs, marketing linkages, etc.; organization of a policy workshop on the draft national wetlands management strategy plan to provide impetus and inputs towards its finalization; development of a project exit strategy and future sustainability options for the protected areas; support for a feasibility study on designating Addu City and Fuvahmulah Island as ‘Important Bird and Biodiversity Areas’.
5. This component will support: (a) staff costs for the management unit of the Hithadhoo and Fuvahmulah protected areas; (b) operating cost for the implementation of the new protection system; (c) operating costs for implementation of an environmental education and communication program; (d) construction of eco-friendly visitor facilities and related consultants’ services for eco-tourism development, livelihood activities; and construction supervision; (e) consultants’ services and workshops on a national wetlands management strategy plan; and (f) studies on the feasibility of designating Addu City and Fuvahmulah Island as ‘Important Bird and Biodiversity Areas’.
6. **Component 2: Coral reef monitoring:** The purpose of this component is to strengthen and scale up the Coral Reef Monitoring Framework initiated during CCTF-I for improved decision making and management of the coral reefs and related ecosystems by involving private sector stakeholders (such as tourist resorts, dive centers, etc., as well as the planned Protected Area Management Unit – PAMU, in Hithadhoo) in coral reef monitoring.
7. The main objectives of this component are: capacity building of 10 private sector entities (such as tourist resorts, dive centers) by providing the tools and training to monitor the

condition of the coral reefs and the goods and services that they receive from the coral reefs; scaling-up the use of the ‘Coral Reef Monitoring Framework’ to populate the ‘CoralDatabase’ by expanding the baseline and through recurrent monitoring; providing inputs to influence policy on coral reef resource management.

8. The key activities to be financed under this component are: support for newly inducted and existing participating resorts and participating dive centers, and the PAMU in Hithadhoo Island on field data collection and use of the ‘CoralDatabase’ through training workshops, training videos and on-site facilitation visits; continued support to the ‘CoralDatabase’ platform developed under CCTF-I to enhance its functionality and user-friendliness for data entry and storage, analysis and decision-making; development of policy notes and organization of exchange workshops to enable strategic mainstreaming the use of the National Coral Reef Monitoring Framework; support for strategic mainstreaming of the use of the National Coral Reef Monitoring Framework into the EIA regulation, tourism regulation, ‘Green Leaf’ awards for environmental services and other relevant opportunities.

9. The component will finance: (a) consultants’ services and operating cost to support participating entities in field data collection and use of the ‘Coral Database’; (b) consultants’ services to enhance the functionality and user-friendliness of the ‘CoralDatabase’ platform developed under CCTF-I for data storage, analysis and decision-making; (c) consultants’ services and operating cost to develop policy notes and organize workshops to enable strategic mainstreaming of the use of the National Coral Reef Monitoring Program into EIA regulations and resort lease conditions); and (d) consultants’ services to provide strategic and technical advisory support for the PMU, MRC and MoT.

10. ***Component 3: Development of an island level integrated solid waste management system:*** The purpose of this component is to build the institutional capacity of Addu City and Gnaviyani Atoll Councils to plan an atoll/island level integrated solid waste management program to minimize the environmental risks to the country’s marine and terrestrial assets while reducing greenhouse gas emissions. The CCAP will draw upon the experience of CCTF-I (particularly, the solid waste management intervention in Ari Atoll) and focus on strengthening the solid waste management capacity in Addu city and Gnaviyani/Fuvahmulah.

11. The main objectives of this component are: to support a Strategic Options Study that will contribute to the development of an integrated atoll/island solid waste management system; and to demonstrate a system for collection, segregation and composting as part of developing an integrated atoll/island(s) solid waste management system and system for final disposal of residual waste.

12. The key activities to be financed under this component are: Strategic Options Study on solid waste management, including Best Practicable Environment Option selection, assessment of collection and transportation systems, User Pays Framework Model, institutional arrangement to operationalize the integrated solid waste management system, and proposal for the next phase activities; implementation of an atoll/island level composting program at the IWMCs in Addu Atoll and Ganviyani Atoll including community awareness program, source segregation of household level solid waste, system of waste collection and transport to the IWMCs through a user-pays system, simple windrow composting in each of these IWMCs, baling and storage of residual, relatively inert waste until it is transferred for off-island sanitary

disposal; facilitation of training and capacity building for contractors and utility companies in solid waste management; and, conducting communications campaigns to encourage community participation in island solid waste management.

13. This component will finance: (a) consultants' services for the Strategic Options Study; (b) civil works and operating costs for implementation of an atoll/island level composting program at the three IWMCs; (c) operating costs for training and study visits for Island Councils, contractors and the utility company; and (d) consultants' services and operating costs for a communication campaign on solid waste management.

Box 1: The Island Waste Management Model in Ari Atoll

Ukulhas and Fenfushi islands in the Ari Atoll have put in place fully functional integrated island models in the Maldives focused on community participation in source segregation, introduction of user fees, recycling and island level composting of the organic fraction of the waste. This model was identified through MEMP as part of the Best Practicable Environment Option exercise for integrated SWM carried out in the Northern Province. The key features of the model are:

- **Island Waste Management Plan (IWMP):** The IWMP was prepared through a consultative process with the community. It includes institutional arrangements, source segregation of waste, waste collection system, user fees, etc. The IWMPs are approved by the Island Council and the EPA prior to implementation.
- **Household waste segregation and collection:** Households separate their waste into two major groups: inorganic items (e.g.; aluminum, copper, steel, plastics, papers, etc.) and organic items (e.g.; food items, garden wastes, etc.). The segregated waste is collected from the households every day by the Council pick-up truck. Dustbins are also conveniently located across the island at public places.
- **Island Waste Management Center:** Segregated waste is disposed in one of three ways – recycling, composting and disposal of residual waste at a sanitary site:
 - **Recycling:** Recyclables such as non-ferrous metals (aluminum beverage cans, copper wire), ferrous metals (aerosol cans, old steel furnishings or equipment), plastics (polyethylene, PET bottles), glass (bottles and jars), etc., are separated and sold once in about 2 months by the IWMC to recyclers.
 - **Composting:** Organic matter (garden and yard waste, food waste) is composted using a windrow system. Concrete pads (with a system for collection and reuse of leachate in the composting process) have been constructed. The organic wastes are heaped into elongated piles on these concrete pads. The piles are watered and turned periodically to maintain aerobic conditions and moisture. The composting process takes about 2 months. The compost is sold to nearby resorts for use in gardening.
 - **Disposal:** The residual waste is disposed at a sanitary site periodically.
- **User pays:** Each household is charged MVR 100 per month by the Council for the waste management services.
- **Strong community involvement:** For example, Ukulhas marks the 1st of January of each year with a cleaning campaign 'Saafu Ukulhas' (Clean Ukulhas).

Sources:

Ministry of Tourism, Arts and Culture, Republic of Maldives. 2013. *Assessment of Solid Waste Management Practices and its Vulnerability to Climate Risks in Maldives Tourism Sector.*

Aide Memoir, March 2014. Ari Atoll Solid Waste Management Pilot Project.

<http://www.ukulhas.com/attractions/>

14. **Component 4: Mainstreaming climate change into island development planning:** The purpose of this component is to scale up the mainstreaming of climate change into an island development-planning module across all of the atoll/island councils in the Maldives through a partnership with the LGA.

15. The main objectives of this component are to: build awareness and strengthen local government capacity to address climate change adaptation issues relevant to island development; and to support tertiary level education in environmental management including climate change adaptation and mitigation.

16. The key activities to be financed under this component are: scaling up of the orientation course on climate change to cover selected staff, elected representatives, Women's Development Committee members and NGOs from all the atoll/island councils through partnership with the LGA; mainstreaming of training on climate change by integrating the training on island development planning (2016) for all atoll/island councils, through inclusion in the Handbook of Planning published by the LGA, and orientation program for newly elected atoll/island councils (2017); provision of scholarships to students to pursue the Advanced Diploma/Bachelor's Degree in Environment Management program run by the MNU. Funds will be channeled directly from MEE to the MNU for scholarships and expenses incurred only up to the closing date will be claimed.

17. The component will support the facilitation of training on climate change to selected representatives and staff of Atoll Councils, Island Councils, Women's Development Committees and non-governmental organizations; and provision of scholarships for environmental management academic studies run by the MNU.

18. **Component 5: Project Management:** The MEE has the overall responsibility for project implementation and for ensuring that the project objective is met. It will execute the project through the EPA, the MRC of MoFA, MoT and the LGA in close coordination with the atoll/island councils. The CCAP will support the MEE in project management through this component.

19. The objective of this component is to support the various management functions for implementing the project including human resources, monitoring, equipment, operating costs, etc. This component will finance incremental costs to the existing PMU established for MEMP and CCTF-I. Separate budgets/books of accounts would be maintained for each project.

20. The key activities to be financed under this component include: support for PMU staff including a Project Manager, a Wetlands Coordinator, Solid Waste Management Coordinator, Coral Reef Monitoring Coordinator, Communications Coordinator, Finance Officer and a Procurement Officer; support for two full-time Resort Coordinators at MoFA; support for an international technical advisor to provide strategic and technical support to the PMU; support for island level staff at Hithadhoo and Fuvahmulah for guiding and overseeing the implementation of project activities including a Protected Area Manager, a Conservation Officer, two Rangers, a Solid Waste Management and E&S Safeguards Officer.

21. Table 3 below presents details of the additionality of the CCAP interventions over what has been achieved under the CCTF-I project interventions.

Table 3: Additionality of the CCAP over CCTF-I Projects

	CCTF-I Projects	CCTF-II CCAP
Overall Approach	<p>Three geographically scattered projects covering multiple sectors:</p> <ul style="list-style-type: none"> • WCCM: Wetland management, coral reef monitoring and rain water harvesting in Addu, Gnaviyani, North and South Male and Ari Atoll. • CECM: Solar energy, energy conservation and efficiency improvement in Gaafu Dhaalu Atoll. • AASWM: Solid waste management in Ari Atoll. 	<p>Single project with integrated, multi-sectoral, mutually complementary interventions in limited geography for demonstrating a ‘model climate resilient atoll approach’. The interventions include wetland management, coral reef monitoring, solid waste management, and capacity building. The geography is primarily focused on Addu and Gnaviyani atolls.</p>
Wetland Conservation	<p>The WCCM project of CCTF-I accomplished the following for wetlands in Addu and Gnaviyani atolls:</p> <ul style="list-style-type: none"> • Community based wetland management plans developed • Ecotourism concepts and designs developed • Drainage management works implemented 	<p>The CCAP will focus on demonstrating a model for Protected Wetlands Management in Addu and Gnaviyani atolls. Specifically, it will focus on implementation of the Community Based Wetland Management Plans, and ecotourism infrastructure plans and programs developed in CCTF-I. Together these interventions are expected to result in improved wetlands conservation as well as benefits to local communities from eco-friendly livelihoods – both of which have significant adaptation benefits.</p>
Coral Reef Monitoring	<p>The WCCM project of CCTF-I initiated a National Coral Reef Monitoring Program and accomplished the following for coral reef monitoring:</p> <ul style="list-style-type: none"> • Developed monitoring protocols, a web-enabled database platform and trained staff of private resorts on coral reef monitoring • Populated the web-enabled database platform with baseline data from 5 resorts in North and South Male Atolls. 	<p>The CCAP will focus on scaling up the coral reef monitoring in collaboration with the tourist resorts and other entities in the Addu Atoll (as well as other Atolls). Thus, by strengthening and mainstreaming the National Coral Reef Monitoring Program, the CCAP will contribute to building a robust knowledge base for management of these ecosystems that play an important role in climate adaptation of the Maldives.</p>
Solid Waste Management	<p>The AASWM project of CCTF-I focused on capacity building on solid waste management in 5 islands of the Ari Atoll and established a model for island based integrated solid waste management with a focus on composting on the Ukulhas island of the same atoll.</p>	<p>The CCAP will bring in best practices of solid waste management in an integrated manner to the Addu and Gnaviyani atolls. Considering that solid waste dumping is one of the major threats to wetlands on both these atolls, this intervention is critical to wetland conservation and environmental management.</p>
Capacity	<p>The WCCM project in CCTF-I has developed</p>	<p>The CCAP will scale up the climate</p>

<p>Building for Mainstreaming</p>	<p>curricula for training of Atoll/Island Council staff and elected representatives in integrating climate change issues into island development planning. This training was also delivered to cover about half of the atolls.</p>	<p>change adaptation training as a national activity to cover all the atoll/island councils. In addition, the CCAP will also support the development of trained professionals in the area of environmental management and climate change through scholarship support to the Bachelor's degree in Environment Management course in the Maldivian National University.</p>
--	--	--

Annex 3: Implementation Arrangements
REPUBLIC OF MALDIVES: Climate Change Adaptation Project (CCAP)

A. Project Administration Mechanisms

1. The institutional arrangements for project implementation have been established, building on the existing arrangements in place for the CCTF-I projects and include the following:
2. **Climate Change Advisory Council.** The CCAC is responsible for providing strategic guidance to the CCTF, ensuring that it is aligned with the GoM's climate change priorities and Strategic Action Plan (SAP). The apex planning bodies of the GoM, the Economic & Youth Council and the Social Council approve the proposals referred by the CCAC for submission to IDA for financing.
3. **Implementation Review Steering Committee and Technical Committee.** The CCTF has a Steering Committee chaired by the Minister of MEE, which comprises the LGA, key stakeholder ministries (MEE, MoFA, MoF, MoT) and their affiliated agencies and has representation from the atoll/island councils, donors and the World Bank. The role of this Steering Committee is to review progress and provide guidance for implementation. The CCTF has a Technical Committee composed of technical experts, private sector and leading civil society organizations. The Technical Committee is responsible for monitoring progress of implementation and assessing results on the ground.
4. The details of the project implementing agency and its national and local partners are provided below:
5. **Implementing agency:** The MEE has the overall responsibility for project implementation and for ensuring that the project objective is met. The MEE will coordinate with other participating ministries and institutions at the national and atoll/island levels. The MEE's existing PMU will coordinate project activities, ensure fiduciary compliance and be responsible for monitoring, evaluation and reporting. The PMU at the national level is lead by the Project Director (Permanent Secretary of MEE) and is staffed with a Project Manager, Wetlands Coordinator, Solid Waste Management Coordinator, Coral Reef Monitoring Coordinator, Communications Coordinator, Finance Officer, and Procurement Officer. The project will also support two full-time Resort Coordinators at MRC. The GoM will provide a E&S Safeguards Coordinator, a Works Engineer and a Database Manager for the project.
6. In order to decentralize project management, project staff will be posted at Hithadhoo and Fuvahmulah for guiding and overseeing the implementation of project activities. The island level staff at each island will include a Protected Area Manager, a Conservation Officer, two Rangers, a Solid Waste Management and Environmental & Social Safeguards Officer. The island level staff in Hithadhoo will operate from the office of the Addu City Council until the visitor center is completed. The island level staff in Fuvahmulah will operate from the Gnaviyani Atoll Council Office. All funds, however, for the proposed project will be routed through the PMU in MEE.

7. **National Level Partners:** At the national level the MEE will execute the project through EPA, MoFA, MRC, LGA, MoT and will sign partnership agreements with these institutions.
8. The EPA of the MEE will provide technical oversight and coordination support to the wetland conservation and solid waste management components. The EPA provides regulatory clearance to the safeguards documents of the project and provides permits for survey activities. It will also facilitate mainstreaming of coral reef monitoring into EIA regulations.
9. The MoFA will setup standards and audit monitoring compliance, ensure continuity of the coral reef monitoring within the MRC, lead the policy initiatives and eventually own the CoralDatabase.
10. The MRC will provide technical oversight and coordination support to the coral reef monitoring component. The MRC will appoint Resort Coordinators to provide on-site capacity building support to participating resorts. It will also provide a Database Manager to support the CoralDatabase and enable its eventual transfer and management at a national server.
11. The MoT will appoint a focal point, support implementation and delivery by the tourist operators, and provide assistance in coordinating the coral reef monitoring activities. It will also facilitate mainstreaming of coral reef monitoring into tourism regulations.
12. The LGA will appoint and train master trainers to deliver training to atoll and island councils for mainstreaming climate change into island development planning.
13. The MNU will administer the sponsorships to students to pursue the course on Advanced Diploma/Bachelor's Degree in Environment Management.
14. **Atoll/Island Level Partners:** At the island level, the MEE will work in close coordination with the atoll/island councils, the CABs, and the participating resorts/dive centers and will sign partnership agreements with these institutions:
15. The atoll/island councils will ensure community participation in project implementation, coordinate with the PMU and EPA to facilitate effective functioning of the PAMU, and, coordinate with the Utility Company on the functioning of the IWMCs. The CABs will coordinate with the atoll/island councils to support the effective functioning of the PAMU. The Utility Company will manage the IWMC (in Fuvahmulah) and coordinate with the atoll/island councils on the management of the IWMCs subject to provisions in the MoU between the Councils and MEE. A MoU will be signed between (a) the Addu City Council, the EPA and MEE, and between (b) Gnaviyani Atoll Council, the EPA and MEE for clarifying roles and responsibilities for the implementation of the project activities.
16. Participating resorts, dive centers, live aboards, etc., will undertake coral reef monitoring as per the agreed protocols and update the CoralDatabase. A MoU will be signed between the MEE, EPA, MoFA, MoT and the private resorts/dive centers/Protected Area Management for clarifying roles and responsibilities for the coral reef monitoring.

B. Financial Management, Disbursements and Procurement

(a) Financial management

17. The PMU in MEE has the primary responsibility for maintaining the project's financial management arrangements. There will be no funds transferred to any other agencies. The accounting and payments process will be centralized at the PMU. The PMU, which has been operating since 2008, has gained significant experience in managing Bank-funded projects. The Bank conducted a financial management capacity assessment of the PMU and reviewed the existing financial management arrangements in place for projects in the first phase of the CCTF, which will also be applicable to the CCAP in the second phase. The capacity assessment concluded that the existing financial management arrangements are appropriate and the PMU and financial management staff has the capacity to manage the project's financial management arrangements, thereby providing reasonable assurance that the funds will be used for the intended purposes. Financial management capacity is sufficient to handle the various ongoing projects of which several will close shortly. Financial management arrangements meet the requirements set out in OP10.00, section 6. Financial management risk is rated moderate.

18. **Operations manual.** The Manual has been revised to meet the requirements for the project, including the financial management arrangements. The financial management chapter of the Operations Manual details the procedures for budgeting, accounting, funds flow, financial reporting, internal controls and audit arrangements, including Terms of Reference (ToR) for the annual audit. The Manual also includes the formats for accounting registers and books of accounts, fixed asset and inventory management process, and Interim Unaudited Financial Reports (IUFs).

19. **Financial reporting.** The PMU will be responsible for the project financial reporting. Commencing from the end of the first calendar quarter after project effectiveness, the PMU will submit quarterly IUFs to the Bank within 45 days from the end of each such quarter. The formats of the IUFs have been agreed with the implementing agency.

20. **Internal controls.** The PMU's internal controls are documented in the Operations Manual to ensure transparency and accountability.

21. **Internal audit.** The MEE has established an internal audit unit, to be fully staffed soon. The project will be subject to a regular internal audit carried out by the MEE internal audit unit. The internal audit will assess whether funds have been disbursed on a timely basis, reached the intended recipients, and whether transactional controls and propriety have been maintained and used effectively and efficiently for the intended purposes. The internal audit reports will be shared with the Bank.

22. **Audit.** Financial statements of the project will be prepared by the PMU and will be audited annually by the Auditor General's Office of Maldives, which is acceptable to the Bank. The audited financial statements together with the auditor's report will be submitted to the Bank within six months of the end of the fiscal year. According to Bank's Access to Information Policy, the audit report will be disclosed publicly on the Bank's website. The audit report will be monitored in Bank's Portfolio and Risk Management (PRIMA) System.

23. **NGO/community based organization (CBO) interventions.** Some island NGOs and CBOs may also carry out certain project specific interventions. However, no project funds will be transferred to these entities. The PMU will centrally manage financial management and procurement activities related to the interventions made by these entities.

24. **Financial management supervision.** Financial management supervision consists of the Bank’s financial management specialist’s visits to the PMU, desk reviews of internal and external audit reports, review of IUFRs, SOE reviews, and joint financial management/procurement reviews to periodically assess and monitor the adequacy of the project’s fiduciary arrangements. The Bank will carry out a field level financial management supervision mission at least once every six months.

25. A DA in US Dollars will be set up with the Maldivian Monetary Authority, the Central Bank, to receive funds from the CCTF through the Bank. The Bank will advance an amount to the DA to meet the estimated expenditures for the first six months, as forecasted in the IUFRs. From this DA, payments will be made to suppliers, vendors and consultants. With respect to large international payments, the PMU will have the option of requesting the Bank to make direct payments to the supplier. Several agencies/institutions will be involved in planning, coordinating and implementing project activities. Financial management will however be centralized at the PMU and all payments will be made directly by the PMU. Grant proceeds will be disbursed 100 percent, exclusive of taxes. GoM will be responsible for the payment of taxes. The project includes provision for retroactive financing not exceeding 20% of the total grant value (or US\$ 0.842 million) for payments made prior to Grant signing date but on or after December 1, 2014, for Eligible Expenditures under Category (1) given in Table 4.

26. All funds for the proposed project will be routed through the PMU in MEE, which will be responsible for funding all project expenditures, accounting for them, and for reporting on the financial and physical progress. A book of accounts will be maintained on a cash basis and all applicable accounting standards and policies will be applied. The accounting software currently used by the PMU will be used for the project with some customization that will be completed by October 31, 2014.

27. The following table specifies the categories of eligible expenditures to be financed out of the proceeds of the grant (“category”), the allocations of the amounts of the grant to each category, and the percentage of expenditures to be financed for eligible expenditures in each category.

Table 4: Category of eligible expenditures, grant to each category, and the percentage of expenditures

Category	Amount of the Grant Allocated (expressed in US\$)	Percentage of Expenditures to be Financed (exclusive of taxes)
(1) Goods, works, non-consulting services, and consultants’ services, training and workshops, and incremental operating costs	4,110,000	100%
(2) Training (Scholarships) under Part 4(b) of the project	100,000	100%
TOTAL AMOUNT	4,210,000	

(c) Procurement

28. **Capacity Assessment:** The PMU, that manages several Bank-funded projects, will be responsible for overall procurement oversight under this project. The PMU is experienced in Bank procurement and has gained experience under the following World Bank projects: “Maldives Clean Energy for Climate Mitigation Project” (P128268), “Maldives Environmental Management Project” (P108078), and “Maldives Ari Atoll Solid Waste Management Project” (AASWM) (P130163).

29. Additional procurement support may be needed when the CCAP becomes fully functional as the procurement team in MEE handles several projects and grants in parallel. The main procurement risks identified by the assessment are: (a) inefficiencies in the complaint redressal system; (b) poor implementation of public disclosure procurement actions; (c) inherent weaknesses in transparency and fairness of procurement processes; (d) inadequate capacity of national consultants/contractors that in some cases hinders in designing appropriate qualification requirements as per Bank’s Standard Bidding Documents for Goods and Works; and (e) inadequate experience in contract administration. Agreed risk management measures include the following: (a) procurement staff will be trained, specifically on fraud and corruption flags, and on addressing complaints; (b) the PMU will prepare and forward to the Bank an annual procurement progress report, which will include, *inter alia*, procurement plan updates, action on findings of post reviews and other procurement and contract administration issues; (c) the PMU will implement a monitoring mechanism for procurement, which will include implementation, as well as the defects liability phase and warranty phase of contracts; and (d) corrective actions to be taken to address deficiencies identified by the Bank post reviews. Overall project procurement is rated low after mitigation measures.

30. **Applicable Guidelines.** Procurement of goods, works and services under this project will be carried out in accordance with: World Bank “Guidelines: Procurement of Goods, Works and Non-Consulting Services under IBRD Loans and IDA Credits & Grants by World Bank Borrowers”, dated January 2011 (Procurement Guidelines); and the “Guidelines: Selection and Employment of Consultants under IBRD Loans and IDA Credits & Grants by World Bank Borrowers”, dated January 2011 (Consultant Guidelines); and the provisions stipulated in the Financing Agreement.

31. **Procurement Responsibilities.** The PMU, that manages several of the Bank-funded projects, will be responsible for overall procurement oversight under this project. The staff in this unit have adequate experience in Bank procurement procedures and can handle complex operations. A Procurement Officer in the PMU will manage all the procurement in the CCAP and may be assisted by junior staff. Project staff will receive procurement training, facilitated by the Bank, through a comprehensive capacity building program within and outside the country. Junior staff would be trained on-the-job.

32. **Training and Workshops.** Plans for training and workshops will be developed by the PMU and included in the annual project work plan. Expenditures incurred in accordance with the approved plans for training and workshops will be the basis for reimbursement.

33. **Procurement of Goods, Works and Non-consulting Services.** Goods, Works and Non-consulting Services procured under this project shall be procured following ICB, NCB, Shopping, Direct Contracting; and Community Participation procedures, which have been found acceptable to the World Bank.

34. **Selection of Consultants.** Major consultancy services to be procured shall follow the World Bank guidelines for selection of consultants and standard documents of the Bank shall be used. Short lists of consultants for services estimated to cost less than US\$300,000 or equivalent per contract may be composed entirely of national consultants in accordance with the provisions of paragraph 2.7 of the Consultant Guidelines. The Bank’s Standard Request for Proposal (RFP) (October 2011) will be used as a base for all procurement of consultancy services under the Project. The following methods will be applicable for selection of consultants, consistent with the relevant sections of the Bank's Consultant Guidelines:

- a. Quality- and Cost- Based Selection (QCBS).
- b. Quality-Based Selection (QBS).
- c. Least Cost Selection (LCS).
- d. Fixed Budget Selection (FBS).
- e. Selection based on Consultants’ Qualifications (CQS): for services estimated to cost less than US\$300,000 equivalent per contract, in accordance with the provisions of paragraph 3.7 of the Consultant Guidelines.
- f. Single-Source Selection (SSS).
- g. Procedures set forth in paragraphs 5.2 and 5.3 of the Consultant Guidelines for the Selection of Individual Consultants.
- h. Sole Source Procedures for the Selection of Individual Consultants.

35. **Thresholds for Procurement Methods and Prior Review.** The review thresholds and requirements for different methods of procurement of works, goods, non-consulting services and selection of consultants are listed in the table below.

Table 5: Thresholds for Procurement Methods and Prior Review

Expenditure Category	Contract Value (Threshold)	Procurement Method	Contracts/Processes Subject to Prior Review
Goods, Works and Non-Consultancy	>=US\$1,000, 000	ICB	All contracts over US\$600,000 equivalent.
	<US\$1,000,000	NCB	All contracts subject to post review
	<=US\$50,000	Shopping	All contracts subject to post review
		DC	All contracts costing more than US\$50,000 equivalent.
Consultant Services (firms)	>=US\$300,000	All competitive methods; advertise internationally	All contracts.
	<US\$300,000	All competitive methods; advertise locally	All contracts over US\$200,000 equivalent.
	<US\$300,000	CQS	All contracts costing more than US\$200,000 equivalent.
		SSS	All contracts costing more than US\$50,000 equivalent.

Individual Consultants		IC (Section V of Consultant Guidelines) IC - Sole source	All contracts over US\$100,000 equivalent. All contracts costing more than US\$50,000 equivalent.
------------------------	--	---	--

36. **Post Review.** Contracts below the prior review threshold for goods, works and consultancy services will be subject to post review, as per the procedure set forth in paragraph 4 of Appendix 1 of the Bank’s Procurement and Consultant Guidelines. The Borrower shall retain complete documentation for each contract and make it available to the Bank or its nominated consultant for carrying out the post review. At least 10 percent of contracts that have not been prior reviewed would be post reviewed.

37. **Disclosure.** Key documents related to procurement will be disclosed on the borrower’s website. This will include the selection process of sub-project developers.

38. **Procurement Plan.** The Procurement Plan for the first 18 months of project implementation, acceptable to the Bank, has been prepared by the PMU. The Procurement Plan will be made available on the PMU website, MEE website, and the Bank’s external website, after project approval. The Procurement Plan will be updated annually or when required, to reflect project implementation needs and improvements in institutional capacity. The Procurement Plan Execution System (Spanish; SEPA), is a web based procurement plan execution and management tool that will be rolled out during the first nine months of project implementation.

(d) Environmental and Social (including safeguards)

39. **Environment (including Safeguards).** Overall, the CCAP has been categorized as B in order to respond to risks involved especially in activities within and around protected areas. Based on the implementation experience of CCTF-I, and the project activities envisaged under CCTF-II, the following safeguard policies have been triggered:

- OP 4.01 – *Environmental Assessment* to ensure any environmental impact associated with project activities are identified in time and mitigated.
- OP 4.04 – *Natural Habitats* as the project area consists of Protected Areas and Environmentally Sensitive Areas.
- OP 4.11 – *Physical Cultural Resources* as undocumented and non-researched ruins of cultural and historical significance have been found that require protection.
- OP 4.12 – *Involuntary Resettlement* to address social impacts from regulations on access to designated Protected Areas.

40. An Environmental and Social Assessment and Management Framework (ESAMF) has been developed as the safeguards instrument for the CCAP on the basis of the following safeguards instruments from the CCTF-I supported projects: Environment and Social Due Diligence (ESDD) reports prepared for the WCCM and AASWM projects; and, the two Environment and Social Impact Assessments (ESIAs) carried out for the WCCM project (this also applies to section on Social below).

41. The ESAMF includes protocols for screening project activities, guidelines for mitigation of environmental and social risks, and guidance on development of ESIAs and Environmental

Management Plans (EMPs). It also specifies a plan for providing basic training in the use of the screening protocols and mitigation guidelines. The associated cost to implement EMPs has been integrated into the project budget. The project will ensure that all works contracts will include the EMP, and the cost of implementing the EMP will be identified as an item in the Bill of Quantities.

42. Consultations with key stakeholders including atoll/island councils were held in Fuvahmulah and Addu city during 27–28 August, and week of September 23, 2014 to inform the stakeholders including the project affected people, about the details of the project activities, environmental and social risks involved and proposed mitigation measures together with the grievance redressal mechanism. The consultation discussions/opinions/suggestions of the stakeholders were documented as part of the ESAMF. The draft ESAMF was disclosed to the public by mid-September, 2014 and the final version on November 26, 2014. The executive summary of the document will also be translated into Divehi. The operational requirements of the ESAMF have been captured in the Operations Manual of the project.

43. The MEE will provide an Environmental and Social (E&S) Safeguards Coordinator who will play a central role of managing CCTF-II safeguards requirements. S/he will report to the Project Manager and will work closely with the Wetlands Coordinator, Solid Waste Management Coordinator and Coral Reef Monitoring Coordinator. The E&S Coordinator will be responsible for ensuring the overall implementation of environment and social plans and will also liaise with other agencies, contractors and engineering supervisors at the island level to implement safeguards mitigation measures. The E&S Coordinator will be responsible for monitoring and evaluation of safeguards implementation and will report on compliance and status of performance indicators. One E&S Officer each on Addu and Fuvahmulah will be responsible for covering the project sites and will work closely with the consultants, contractors and staff at the sites and with the E&S Coordinator centrally. The E&S Officer at the island level will also be the first level of contact for any grievance/feedback for the community. The E&S Coordinator will take the leadership to orient staff and implementing partners of the ESAMF and on how to operationalize it on the ground.

44. **Social (including Safeguards).** Overall, the CCAP does not envisage severe adverse impacts and hence has been categorized as B. The project however will trigger OP 4.12 on involuntary resettlement as wetland conservation may have some adverse impact on livelihoods of those dependent on wetlands for cultivation. Since there is no indigenous community in Maldives, and OP 4.10 on indigenous community has not been triggered.

45. The ESMF includes a screening process of project activities, guidelines for assessment of adverse impacts, an entitlement framework and mitigation of social risks, and guidance on preparation of Resettlement Action Plan (RAP) if required. As part of the ESMF, a Process Framework has been prepared to address social impacts from restrictions of access to natural resources. The Framework describes the requirements and planning procedures for grant applicants and subsequently grantees in the preparation and implementation of related activities. As part of the ESAMF, a Gender Development Framework has also been designed which will help to analyze gender issues both during the preparation as well as implementation stages of the sub-project, and to design interventions to address women's needs. Gender analysis will be part of the social assessment at the sub-project level. It was also agreed that the

CCAP will track beneficiaries during the implementation stage – relevant monitoring indicators have been added in ESAMF to enable this.

46. Sustainability of the CCAP will depend substantially on meaningful participation and support of key stakeholders, especially local communities. Therefore, in addition to overall strategic communication efforts, the CCAP will have tailor-made interventions to engage with local communities and key stakeholders to ensure inclusion and participation in the planning, implementation and subsequent operation of the subprojects. These interventions will include: (i) information, education, and communications (IEC) campaigns; (ii) mobilization of local communities (particularly women); (iii) transparent consultations; and (iv) dissemination of project information. The draft ESAMF has been consulted with the councils of Fuvahmulah and Addu city in the week of September 23, 2014 and was disclosed to the public prior to the consultations. The consultation results were incorporated in the final ESAMF and re-disclosed in-country on November 26, 2014. The ESAMF will be translated in Divehi and a hard copy of the translated version will be placed in all Addu City Council and Fuvahmulah Atoll Council offices. The ESAMF was disclosed in InfoShop on December 5, 2014. The Process Framework was also disclosed locally as well as on the MEE website on January 29, 2015 and on Infoshop on February 5, 2015.

47. A three-tier grievance mechanism will be established which will be accessible to all community members. The island council will be the first level of contact for any aggrieved person. A CAB will be created and complaints received by the island council will be sent to the CAB for advice. If the aggrieved person is not satisfied, s/he can approach the MEE. The E&S Safeguards Coordinator in the PMU will be the contact person in the MEE. If the issue is not resolved, the aggrieved person has the option of approaching the judiciary. In cases where vulnerable persons are unable to access the legal system, the Attorney General's office will provide legal support to the vulnerable person(s). The PMU will assist the vulnerable person(s) in getting this support from the Attorney General's Office. The PMU will also ensure that there is no cost imposed (such as for travel and accommodation) on the aggrieved person if the person belongs to the vulnerable groups. The verdict of the judiciary will be final.

(e) Monitoring and Evaluation

48. Monitoring and evaluation arrangements will build upon the arrangements established in CCTF-I for the WCCM project. The Project Manager in the PMU has the overall responsibility for planning and facilitating implementation of monitoring and evaluation activities. The PMU will provide quarterly technical and financial reports to the Bank on project implementation progress. An evaluation study will be undertaken by a consultant to be delivered at least six months before the end of the project implementation period. The study will assess progress towards achievement of the stated outcomes and identify an exit strategy for sustainability and scaling-up. The study methodology will be participatory involving consultations with all key stakeholders. The Bank team will monitor project outputs and outcomes during project supervision using reports compiled by PMU, review of output documents, interactions with key stakeholders, site visits to project intervention locations, etc.

(f) Role of Partners

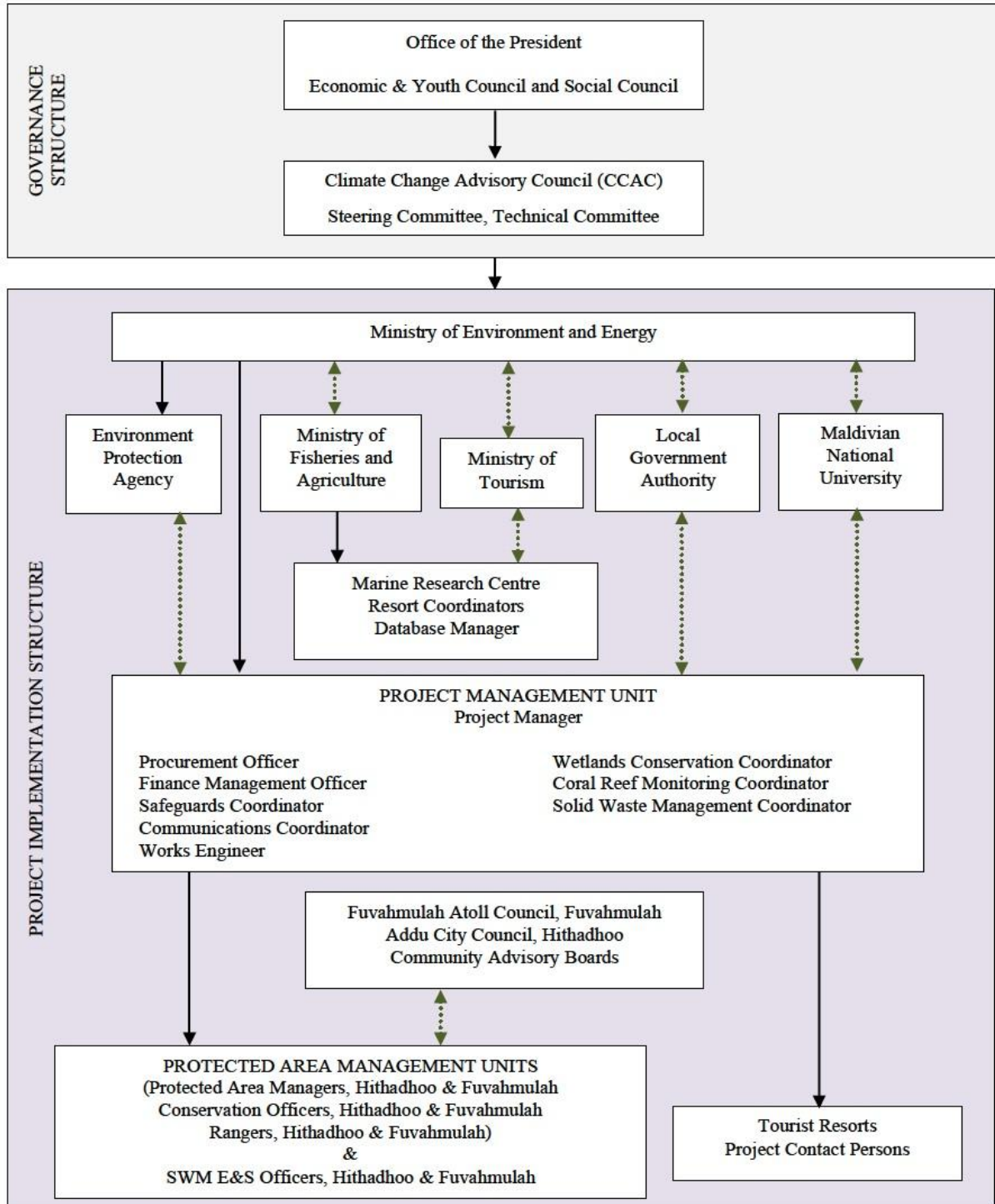
49. The CCTF-I was funded by the EU and the Government of Australia with a total allocation of US\$10.3 million. The EU has provided an additional contribution of EUR 3.85 million for the second phase of the CCTF. An Implementation Review Steering Committee composed of representatives of the donor partners, World Bank as administrator, MEE and agencies responsible for implementing the program will meet semi-annually to review the progress and provide strategic guidance to the program.

Table 6: Institutional Arrangements for the CCAP

Level	Institution	Key role and responsibilities in the CCAP
National	Ministry of Energy and Environment (MEE); Project Management Unit (PMU) within the MEE	Implementing agency responsible for overall project implementation including: Staffing and operating the PMU (including providing an E&S Safeguards Coordinator and a Works Engineer). Coordinating with other participating Ministries and institutions at the national and atoll/island levels. Coordinating project activities. Ensuring fiduciary compliance. Monitoring, evaluation and reporting to the Bank.
	Environment Protection Agency (EPA)	Provides technical oversight and coordination support to the wetland conservation and solid waste management components. Provides regulatory clearance to the safeguards documents of the project and provides permits for survey activities. Facilitate mainstreaming of coral reef monitoring into EIA regulations.
	Ministry of Fisheries and Agriculture (MoFA)	Setup standards and audit monitoring compliance, ensure continuity of the coral reef monitoring within the MRC, lead the policy initiatives and eventually own the CoralDatabase.
	Marine Research Centre (MRC)	Provides technical oversight and coordination support to the coral reef monitoring component. Appoint Resort Coordinators to provide on-site capacity building support to participating resorts. Providing Database Manager to provide support to the CoralDatabase and enable its eventual transfer and management at a national server.
	Local Government Authority (LGA)	Appoint and train master trainers to deliver training to atoll and island councils for mainstreaming climate change into island development planning.
	Ministry of Tourism (MoT)	Appoint a focal point, support implementation and delivery by the tourist operators, and provide assistance in coordinating the coral reef monitoring activities. Facilitate mainstreaming of coral reef monitoring into tourism regulations.
	Maldivian National University (MNU)	Administer sponsorships to students to pursue the course on Advanced Diploma/Bachelor's Degree in Environment Management.
Atoll/Island Level	Atoll/Island Councils	Ensure community participation in project implementation. Coordinate with the PMU and EPA to facilitate effective functioning of the Protected Area Management Unit. Coordinate with the Utility Company on the functioning of the Island Waste Management Centre (IWMCs).
	Community Advisory Boards	Coordinate with the Atoll/Island Councils to support the

		effective functioning of the Protected Area Management Unit.
	Participating resorts, dive centers, live aboards, etc.	Undertake coral reef monitoring as per the agreed protocols and update the CoralDatabase.
	Utility Company	Manage the IWMC (in Fuvahmulah). Coordinate with the Atoll/Island Councils on the management of the IWMCs.

Figure 1: Institutional Arrangements in the CCAP



Annex 4: Implementation Support Plan
REPUBLIC OF MALDIVES: Climate Change Adaptation Project (CCAP)

A. Strategy and Approach for Implementation Support

1. The Bank will provide implementation support to MEE, GoM to implement the project efficiently and effectively. The supervision strategy will focus on risk mitigation, knowledge management and capacity building. The Bank team will maintain a regular dialogue with key stakeholders at the national level as part of semi-annual supervision missions, undertake periodic reviews in the field on a sample basis, identify and offer technical advice, as needed, and support exchange of experiences and learning.
2. The Bank's Task Team Leader and the majority of the fiduciary and safeguards staff will be based in Colombo to provide close implementation support. The Bank will provide close support during the first year of implementation to ensure that the project activities, such as procurement of key consultancies and implementation of works, are initiated and completed on time.
3. During implementation, the Bank will provide as needed specialized expertise in the areas of marine biology, protected area management, solid waste management, information technology (for supporting the CoralDatabase), and monitoring and evaluation.

B. Implementation Support Plan

4. Project implementation and supervision will be conducted through six-monthly supervision missions during the project implementation duration; on-demand technical missions as needed; and a review of the semi-annual implementation progress reports prepared by the PMU. The Bank team will monitor project outputs and outcomes during project supervision using reports compiled by PMU, review of output documents, interactions with key stakeholders, site visits to project intervention locations, etc.
5. An Implementation Completion and Results Report will be prepared at the end of the project to assess achievement of project objective and lessons learned.

Table 7: What would be the main focus in terms of support to implementation during:

Time	Focus	Skills Needed	Resource	Partner Role
First twelve months	Oversight of technical assurance to preparation of TORs procurement documents and recruitments of consultancies and service contractors for the project components as per the procurement plan	Project management; wetland conservation and habitat management; coral reef monitoring; solid waste management; local government training; procurement; financial management.	US \$ 50,000	Implementing partners will include the MRC, EPA, MoFA, EPA, LGA and so on. Partnerships will also be continued with the University of Queensland in New Zealand and the Welligama Local Government in Sri Lanka.
12-48 months	Implementation support to the activities on wetland conservation, coral reef monitoring, solid waste management and local government training. Liaison and coordination with donors through meetings and reporting Workshops to	All of above and editing/documentation, communications	US \$160,000	
Other				

Table 8: Skills Mix Required

Skills Needed	Number of Staff Weeks	Number of Trips	Comments
Project Management	8	3	
Protected Areas and Wetlands Conservation and Management	10	3	
Coral Monitoring and Management	3	3	
Solid Waste Management	7	6	
Local Government Training Specialist	3	3	
Community and Social Development	7	6	
Environment Management	7	6	
Information Technology	1	0	
Procurement	7	6	
Financial Management	7	6	
Communications	6	4	

Table 9: Partners

Name	Institution/Country	Role
Marine Research Center, EPA, MoFA, EPA, LGA	Maldives	Technical support and implementation of CCAP from the recipient side
Welligama Urban Council	Sri Lanka	Support training in solid waste management
University of Queensland	New Zealand	Technical Advisory on coral monitoring